

## CHAPTER VIII

# Fort Leavenworth and The Command and General Staff School

---

In time of war, it is seldom that a military leader finds himself at the head of troops in which the state of training of officers and men is ideal. Usually, circumstances have left many defects in this training, and the leader must conduct immediate operations with the troops as he finds them. However, he is very conscious of their training defects, and if at the end of the war he is charged with duties connected with army reorganization, he has quite definite plans for training improvement during time of peace.

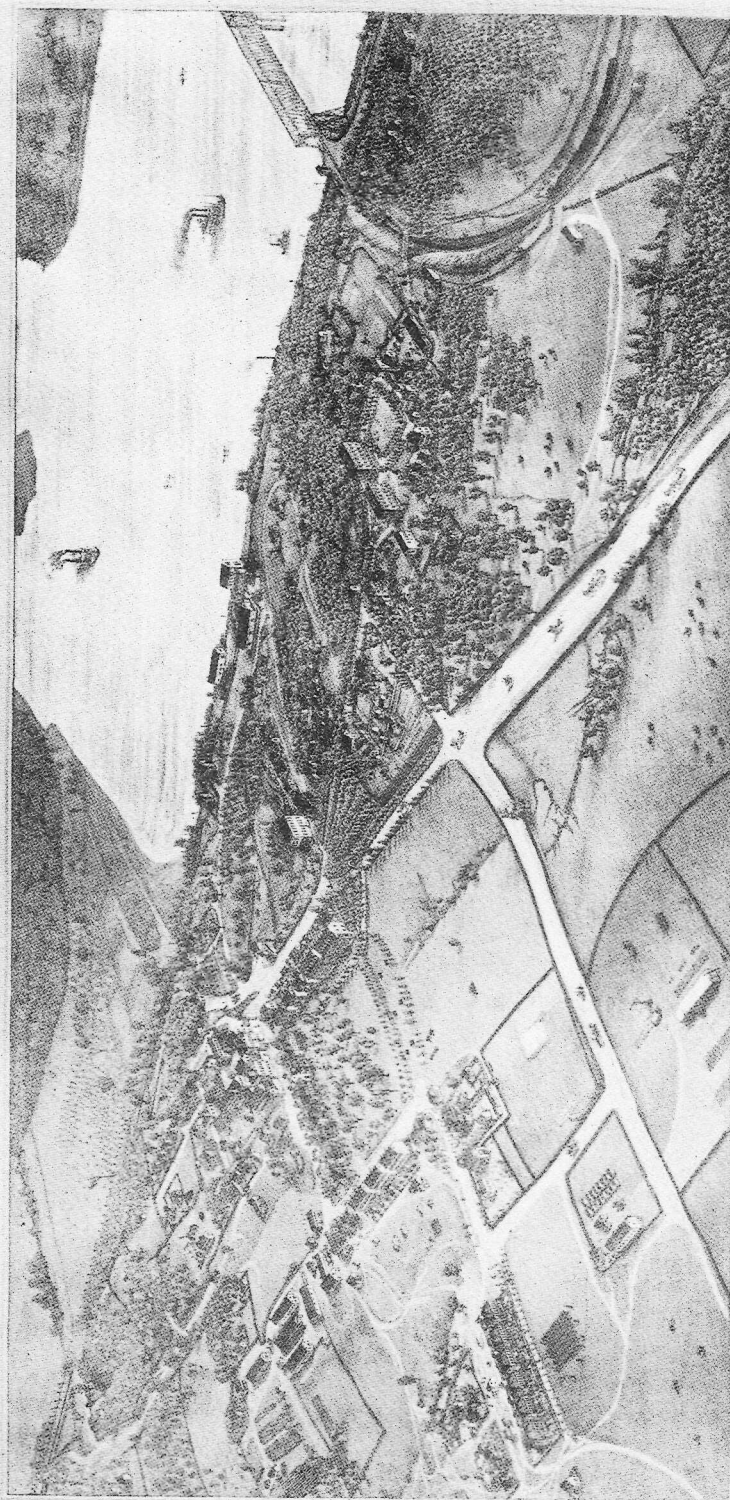
After the Civil War, Generals Grant, Sherman, and Sheridan gave their attention to the problems of army reorganization. During the war, they had seen enough of deficiencies in tactical leadership, and of confusion in giving orders, both in written and oral form, to emphasize the fact that officers who would command with success must add thorough military education to personal qualities of leadership. Hence, they observed with some concern that many of the officers, who had entered the Regular Army during and after the war, were lacking in educational advantages, both fundamental and military. Also, it was evident that a strong tendency to depression in army morale followed the Civil War. Many officers, who with considerable rank had engaged for several years in spirited action in association with large bodies of troops, found themselves stationed as second lieutenants at small western posts, and with little prospects of promotion for many years. The situation contained little of inspiration to these officers and often looked hopeless.

Army leaders sought in education a means of rekindling enthusiasm and esprit. Post schools were established at the various garrisons. The Artillery School which had been established at Fortress Monroe, Virginia, on April 5, 1824,

for the instruction of artillery officers, continued in operation. It is recalled that the school which had been started by Colonel Leavenworth at Jefferson Barracks, Missouri, in 1826, as a "School for the Instruction of Infantry" has been abandoned in 1828, so the necessity for practical instruction of infantry and cavalry officers with forces larger than those to be found at the scattered posts was apparent.

Major General John Pope, who commanded the Department of the Missouri for many years following the Civil War, was conspicuous in urging the concentration of the troops in his Department in order to provide superior opportunities for military training of officers and men. In his annual report of 1877, he said:

"I have so often recommended this consolidation of troops that I dislike to urge it further; but it will be proper again to invite attention to the great advantages for such a purpose possessed by the military reservation at Fort Leavenworth. We have here a reservation large enough for convenient accommodation of at least four regiments, situated at the intersection of many railroads, and easy of access and communication in every direction; in the midst of as fine an agricultural and stock raising country as there is in the United States; where troops can be supplied at a minimum cost, and be instructed under the most favorable circumstances, and where they would be conveniently placed at a moment's notice to be transferred to any point where they might be needed, and sent there in the best condition for duty. As a depot for troops, central enough to fulfill any demands for service at any point west of the Mississippi River, and, indeed, far east of it, I know of no place so suitable, and as the reservation belongs to the United States no expense would be involved, such as would be necessary to build barracks, which, with the labor of a considerable number of military prisoners in confinement here, would be trifling as compared with the cost of building elsewhere. I need not point out the benefit to the service of having two or three regiments concentrated here for military instruction and exercises."



**BIRDS-EYE VIEW  
OF  
FORT LEAVENWORTH, KAN.  
1881.**

*Inspected Skattpast  
about 1 mile north of the  
and half above the ground.*

*Sketch and description  
of the fort and its  
surroundings  
by  
William B. Smith  
and  
John L. Smith  
Topographical Engineer, Dept. of the Army*

(From a sketch made by W. Dannmeier Topographer, Department of the Missouri.)



General Sherman took a great step in supplying the immediate educational needs of the Army and in laying the foundation for our splendid system of advanced military training, when on the fifty-fourth anniversary of the establishment of Fort Leavenworth, as Commander of the Army of the United States, he issued the following General Orders No. 42 of 1881:

HEADQUARTERS OF THE ARMY  
ADJUTANT GENERAL'S OFFICE

WASHINGTON, *May 7, 1881.*

GENERAL ORDERS  
No. 42.

As soon as the requisite number of troops can be assembled at Fort Leavenworth, Kansas, the commanding general Department of the Missouri will take measures to establish a school of application for infantry and cavalry similar to the one now in operation for the artillery at Fortress Monroe, Virginia, the code of regulations for which, so far as applicable, will be observed until the staff of the school can prepare and submit an amended code for the approval of the General of the Army.

The school will habitually consist of three field officers of cavalry or infantry, with not less than four companies of infantry, four troops of cavalry, one light battery of artillery and the officers attached for instruction as hereinafter described. These companies may be changed from time to time according to the exigencies of service. The officers detailed for *instruction* will be *one* lieutenant of each regiment of cavalry and infantry, preferably such as have no families or who have not had previously the benefit of other instruction, who will be nominated by the commanding officer of the regiment and announced in general orders by the Adjutant General of the Army, by or before the 1st of July of each alternate year beginning with July, 1881, for the next term of two years. The officers so detailed will be attached to the companies composing the school, and will perform all the duties of company officers in addition to those of instruction.

The senior field officer, present for duty, will command the school and the next five officers in rank will compose the

staff of the school. All officers will purchase their own textbooks and stationery, but other expenses will be defrayed out of the post fund so far as existing Army Regulations permit, except blackboards, desks, tables, chairs, furniture etc., which will be supplied by the Quartermaster Department on requisition made by the commanding officer, approved by the department commander.

The school will at all times be governed by the rules of discipline prescribed for all military posts, and will be subject to inspection by the department and division commanders; but in matters purely pertaining to the *course of instruction*, will be exclusively subject to the orders of the General of the Army.

BY COMMAND OF GENERAL SHERMAN,  
R. C. DRUM,  
*Adjutant General.*

General Philip Sheridan was in command of the Division of the Missouri in 1881, with headquarters at Chicago, and within his division, Major General John Pope with headquarters at Fort Leavenworth commanded the Department of the Missouri. The duty of initiating the work of establishing the new school devolved upon these commanders. Additional light upon the plans which General Sherman had in mind with regard to the school is shown in the following interesting letter which he sent to General Sheridan:

HEADQUARTERS ARMY OF THE UNITED STATES  
WASHINGTON, D. C.

*November 22, 1881.*

My Dear Sheridan:

I am just in receipt of your letter of the 19th with the tabular list of the officers comprising the new school of Application at Leavenworth.

I need hardly say that I regard it as admirable, and I feel sure that this school will become the best practical military school of all in the United States.

\* \* \* \* \*

I want this new school to start out with the doctrine that service with troops in the field, in time of peace, is the

most honorable of all, and the best possible preparation for high command when war does come, as it always does, suddenly.

I don't want to meddle with this new school or to have it the subject of legislation, because if this is done, like West Point, it will be made political and taken out of our control.

The school should form a model post like Gibraltar with duty done as though in actual war, and instruction by books be made secondary to drill, guard duty, and the usual forms of a well regulated garrison.

I want you and General Pope to feel that I am well pleased with all that has been done, and that I have abundant faith in the future.

As ever, your friend,

W. T. SHERMAN,

The following organizations had the honor of being the first troops assigned to the new school: Headquarters, Band, and Companies F and H, Twentieth Infantry; Company H, First Infantry; Company A, Fourth Infantry; Company G, Eleventh Infantry; Light Battery F, Second Artillery; Troop B, Third Cavalry; Troop L, Fourth Cavalry, Troop G, Seventh Cavalry, and Troop M, Eighth Cavalry.

The immediate task of organizing the school devolved upon Colonel Elwell S. Otis of the Twelfth Infantry. The five service officers present for duty who, in accordance with the order of establishment were to constitute the school staff, were Majors J. J. Upham and J. S. Poland, the first of the Fifth Cavalry, and the latter of the Eighteenth Cavalry; and Captains E. B. Williston, S. B. M. Young, and J. S. McNaught, of the Second Artillery, Eighth Cavalry, and Twentieth Infantry, respectively.

Colonel Otis estimated that the mission of the new school was to meet "the apparent needs of our service, as manifested by the operations of troops during the past few years, both among civilized communities and in the still uninhabited sections of the country." Although the needs of the school have developed beyond the initial necessities of garrison training which has been assigned to other schools, the spirit of General Sherman's emphasis on instruction by

practical application of the principles to be found in books it still continued in the "applicatory system" which forms the basis of instruction at present in the Fort Leavenworth schools.

Under the leadership of Colonel Otis, a "code of regulations" was drawn up and submitted to the War Department which published the following order containing the first program of instruction for the school:

**HEADQUARTERS OF THE ARMY  
ADJUTANT GENERAL'S OFFICE**

*WASHINGTON, January 26, 1882.*

**GENERAL ORDERS  
No. 8.**

I. The garrison and detailed officers prescribed in General Orders No. 42, of 1881, from these headquarters, having reached Fort Leavenworth, the School of Application for Cavalry and Infantry is now declared established. Colonel Elwell S. Otis, 20th Infantry, commands the school subject to the supervision of the department and division commanders, and is charged with the practical instruction of each soldier and officer of his command in everything which pertains to army organization, tactics, discipline, equipment, drill, care of men, care of horses, public property, accountability, etc., and generally of everything which is provided for in Army Regulations. These must be his first care and the second is "theoretical instruction," which ought to precede a commission, but is not always the case, *viz*: reading, writing, grammar, arithmetic, geography, algebra, geometry, and trigonometry sufficient for the measurement and delineation of ground, and such history as every young gentleman should be presumed to know; and third, the "science and practice of war," so far as they can be acquired from books.

II. Under the terms of said general order, and to accomplish the end in view, the General of the Army hereby prescribes the following rules and course of instruction:

The subjects for the school are the lieutenants belonging to the companies which compose the garrison, and especially detailed from the regiments, making about fifty



in all. These will, on reporting, be examined by the staff of the school and divided into two classes, the first only requiring the higher instruction, as defined above, and the second the whole course of two years.

*For the First Class*

Mahan's Outposts.

Meyer's Signaling.

Mahan's (Wheeler's) Field Fortifications.

Woolsey's International Law and Laws of War.

Ive's Military Law.

Operation of War (Hamley).

The Lessons of War as taught by the great masters,  
Colonel France J. Soady.

Lecture by professors and essays prepared by the students from general reading.

Practical instruction in surveying and reconnoitering by itineraries and field notes, as prescribed for the use of the Army.

*For the Second Class*

Correct reading aloud, with care and precision, with proper accent and pauses, to be heard and understood.

Writing—a plain hand, easy to read, designed for the use of the party receiving and not an exhibition of the haste and negligence of the writer, especially the signature.

Grammar (Bingham).

Arithmetic (Hager).

Geometry (Chauvenit).

Trigonometry (Chauvenit).

General Sketch of History (Freeman).

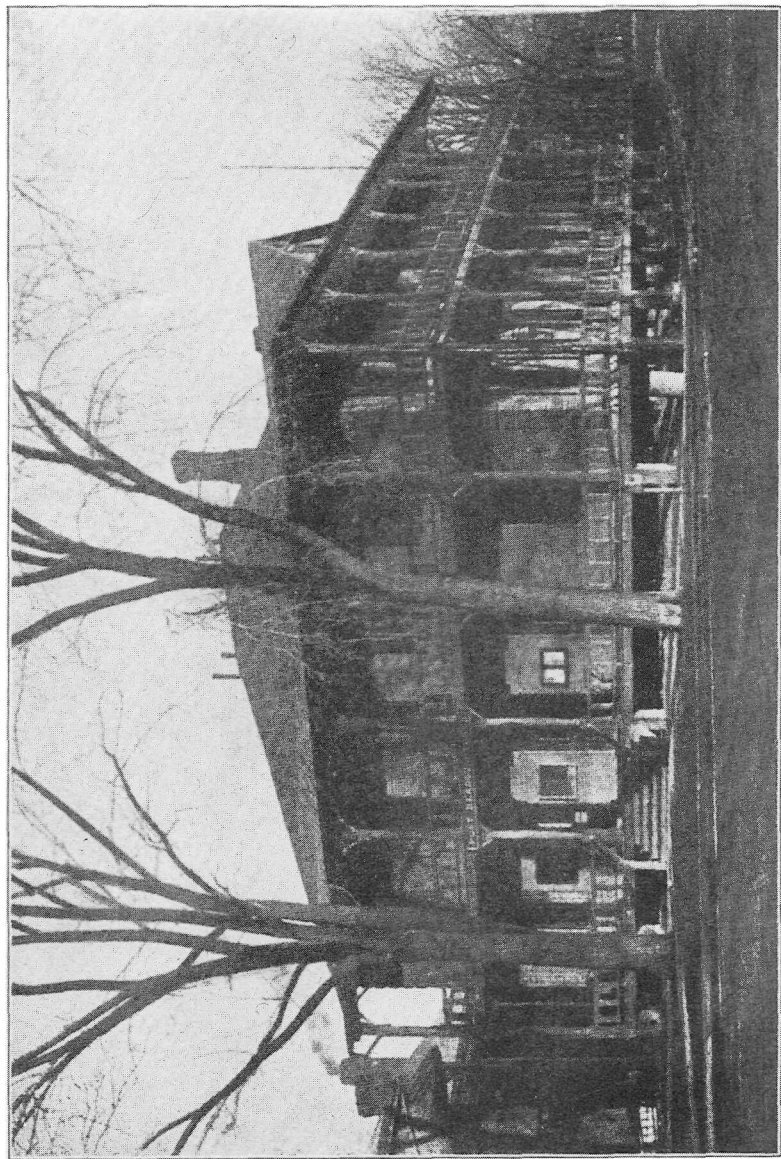
History of the United States (Seavey, Goodrich).

III. The General, in thus inaugurating and prescribing this moderate course of instruction at the school at Fort Leavenworth, after reading carefully the admirable report of the staff, that of the commanding officer, and the indorsements of the department and division commanders, all alike aiming to reach the same result—success—is compelled to announce the fundamental military principle that at one

post there can safely be but one commanding officer. To Colonel Otis the Government looks to make this a school which can prepare the future officers and generals. The *staff* are his assistants and the more faithfully they assist him the higher their honor. Out of the experience of a few years will arise a set of regulations better adapted to the future than the wisest minds can now prescribe. The General believes that it is better to attempt little and succeed than to attempt much and fail. Therefore he had much curtailed the course of study as advised by the *staff*; has left much open for experiment; and wishing naught but what will be practical, yet will reflect honor on the service, he orders as above.

IV. Colonel *Otis* will from time to time issue all orders necessary to carry out the plan herein sketched; will detail from his field officers and captains the necessary instructors for the several classes, and should these prove unwilling or incompetent, they will, if possible, be promptly replaced; and he will provide for contingencies as they arise, till a simple, logical, and natural plan of regulations becomes practicable and is submitted to the General for approval. Should Colonel Otis need the services of officers of engineers, ordnance, signal, etc., he will apply for them by name and they will be detailed, if practicable. The post of Fort Leavenworth is exempted from contributing fifty per cent of its post fund to the regimental funds, and this will constitute a fund for purchasing professional books and maps for the use of the school.

V. The rank of the officers concerned is determined by law, and cannot be modified or impaired by anything at this school. Yet it is well known that the superior officers of the Army are always most willing to advance young officers of special zeal, intelligence, and acquirement; therefore the instructors will keep daily notes of application and progress, and about the 1st of January of each year there will be a public examination by the commanding officer, the *staff* of the school, and such detailed officers as have had charge of classes, at which examination the class will be arranged according to general merit, and special mention made of each officer who deserves it, a report of which will also be made



THE FIRST HOME OF THE GENERAL SERVICE SCHOOLS, 1881



and forwarded to the Adjutant General of the Army for publication and such use as may hereafter be determined.

By command of General Sherman:

R. C. DRUM,  
*Adjutant General.*


The new school was housed in the building at the northwest corner of Kearney and McClellan Avenues, known for years as the Administration Building and afterwards occupied by the Army National Bank. The first class consisted of forty-two lieutenants, and it inaugurated the work with creditable professional zeal. Colonel Otis reported to the War Department that "the progress of the first class had been entirely satisfactory, and the officers composing it have shown a degree of application and appreciation of the course that is alike honorable to them and deserving of commendation."

In 1886 the name of the school was changed to "The United States Infantry and Cavalry School" in the following order:

HEADQUARTERS OF THE ARMY  
ADJUTANT GENERAL'S OFFICE

WASHINGTON, *June 22, 1886.*

General Orders.  
No. 39.

 1. To secure uniformity in official communications addressed or referring to the school of application established at Fort Leavenworth, Kansas, it is hereby announced, for the guidance of all concerned, that the school will hereafter be known and designated as "The United States Infantry and Cavalry School."

\* \* \* \* \*

By command of Lieutenant General Sheridan:

R. C. DRUM,  
*Adjutant General.*

During its early years it was quite necessary to adapt the school curriculum of each year to the varying necessities

and capacities of the different classes. Colonel Otis reported that "the proper classification of officers for purposes of instruction is attended with difficulty. Some have been recently appointed from civil life, have liberal educations, but slight knowledge of military affairs; others come from civil life, with moderate educational attainments, of whom a portion have experienced considerable military service in the field, and others are almost without military experience. Again another class has passed the course of instruction at the United States Military Academy, and some of this class have actively participated with troops in severe campaigns. Both these and a number of appointments from civil life might be denominated practical soldiers. All of these officers must be merged into two divisions. As a consequence, the average ability of the members of the divisions must be estimated, and lessons given according to the estimate fixed."

The successive years were used in observation in order that a definite instruction system might be developed worthy of presentation to the War Department. The results of these years of observation and experience culminated in 1886, when staff, faculty, and students submitted "recommendations based on their experience which would assist the Commandant to a better comprehension of the necessities of the school for its progress and management." The commandant, Brevet Major General A. McD. McCook especially recommended to the War Department that a thorough course in the tactics of the three arms be included in the revised course. The War Department appointed a Board of Officers to prepare new school regulations. (Special Orders No. 162, A.G.O., July 15, 1887.) General Thomas H. Ruger, formerly Colonel of the 18th Infantry and Commanding Officer of the School, was designated as President of the Board. The result of the labors of this Board was approved by Lieutenant General Sheridan, commanding the Army, and was published in General Orders No. 17, A.G.O., March 27, 1888, which formed the first permanent regulations and program provided for the school. Some of the features of these regulations which are at present of considerable interest to us are here repeated:

**HEADQUARTERS OF THE ARMY  
ADJUTANT GENERAL'S OFFICE**

**WASHINGTON, March 27, 1888.**

**General Orders  
No. 17.**

The accompanying regulations and programme of instruction for the U. S. Infantry and Cavalry School, Fort Leavenworth, Kansas \* \* \* are approved \* \* \*

**OFFICIAL DESIGNATION, ORGANIZATION, AND ADMINISTRATION**

\* \* \* \* \*

9. The student officers required to take the prescribed course of instruction shall be one lieutenant from each regiment of infantry and cavalry, to be nominated by the commanding officers of the several regiments, and detailed in orders from the Headquarters of the Army, and such lieutenants belonging to the troops of cavalry and companies of infantry present at the school as shall be detailed by the commandant upon the recommendation of the staff.

\* \* \* \* \*

**INSTRUCTION**

21. The course of instruction shall embrace two years of study and practical exercises, each year to constitute one term.

\* \* \* \* \*

25. The student officers will be embraced in one class, and shall, for the purposes of instruction, be divided into sections of convenient size \* \* \*.

\* \* \* \* \*

27. Instructors and assistant instructors shall keep marks of all recitations and exercises of students under their charge, and at the end of each week submit reports of the same to the Commandant. Such reports will be considered by the staff in determining the proficiency and standing of the students.

\* \* \* \* \*

29. Maximum marks given for perfect recitations shall be 3; for a total failure 0; and between these limits, according to quality, fractions expressed in tenths.

30. The studies shall embrace the study of text-books and recitations therefrom, supplemented by lectures and exercises in application as laid down in the programme for each course. (*See the programme of instruction.*) The recitations shall not as a rule exceed two hours for each section.

\* \* \* \* \*

34. The annual examinations shall take place during the month of June in each year.

\* \* \* \* \*

39. Each member of a section shall draw one from the list of subjects previously prepared by his instructor, upon which he shall recite, and thereafter he may be further examined at the discretion of the staff. The staff shall record the result, assigning numerical values to recitations, as is directed in paragraph 29, and after the examination of a class on a subject is concluded, will arrange the members of the same according to merit based upon the value of marks received during the term and at examination—the examinations to have one-third of the weight of the term marks.

\* \* \* \* \*

#### PROGRAMME OF INSTRUCTION DEPARTMENT OF MILITARY ART

The course of military art is divided into seven parts, and consists of lessons and exercises in application, as follows: Part I, military policy and instructions; Part II, strategy; Part III, tactics; Part IV, operations of a mixed character; Part V, military geography; Part VI, military administration; Part VII, didactic study of campaigns and battles.

\* \* \* \* \*

#### *The Department of Law*

The course of law is divided into three parts and consists of lessons in the section room supplemented by lectures. Part I, military law; Part II, constitutional law; Part III, international law.

\* \* \* \* \*



## DEPARTMENT OF ENGINEERING

*Course of Topography*

\*       \*       \*       \*       \*       \*

*Course in Field Fortification*

\*       \*       \*       \*       \*       \*

*Course in Field Engineering*

\*       \*       \*       \*       \*       \*

*Course in Signaling and Telegraphy*

\*       \*       \*       \*       \*       \*

*Course in Mathematics*

\*       \*       \*       \*       \*       \*

## DEPARTMENT OF CAVALRY

The course of cavalry is divided into four parts, and consists of recitations, drills, problems, and field exercises. Part I, cavalry tactics; Part II, cavalry field service; Part III, equitation; Part IV, hippology.

## DEPARTMENT OF INFANTRY

The course of infantry is divided into two parts, and consists of recitations, drills, problems, and field exercises. Part I, infantry tactics; Part II, infantry field service.

\*       \*       \*       \*       \*       \*

## DEPARTMENT OF ARTILLERY

The course of artillery including a limited course in ordnance and gunnery, consists of recitations, lectures, problems, and field exercises.

\*       \*       \*       \*       \*       \*

## MILITARY HYGIENE, EARLY AID TO THE INJURED

The course of military hygiene, early aid to the injured, etc., is divided into two parts, and consists of lectures supplemented by recitations in the lecture room. Part I, military hygiene; Part II, early aid to the injured, etc.

\*       \*       \*       \*       \*       \*

These regulations of 1888 marked an important forward step in the development of the instructional system at

the Fort Leavenworth schools. By the introduction of a systematic course in tactics, the foundation was laid for the gradual building up of a school for the comprehensive training of officers of the Army in the field duties connected with higher command and staff functions.

It seemed desirable to furnish a reward for those members of each class who excelled in their work, hence in 1890 the following order was issued providing for the annual designation of honor graduates:

**HEADQUARTERS OF THE ARMY  
ADJUTANT GENERAL'S OFFICE**

*WASHINGTON, February 21, 1890.*

General Orders  
No. 18.

On the recommendation of the Major General Commanding the Army the Secretary of War directs that the following orders be published for the government of all concerned:

Hereafter as soon as practicable after the close of the final examination of the classes of student officers undergoing instruction at the U. S. Artillery School and the U. S. Infantry and Cavalry School, the respective commandants will report in writing to the Adjutant General of the Army as follows:

1. \* \* \* (refers to the Artillery School).

2. The names of three officers of the graduating class at the Infantry and Cavalry School who shall have most distinguished themselves by general proficiency in the prescribed courses of study, as determined by the general merit roll of the class made up by the staff of the school.

\* \* \* (refers to similar reports concerning previous classes).

Hereafter, so long as any such graduate shall be borne upon the active or retired list of the Army, his name will appear in the Army Register in the "staff corps," "regimental," or "retired officers" list to which it properly belongs, followed by the words "Honor Graduate of the Ar-

tillery School, 18—," or "Honor Graduate of the Infantry and Cavalry School, 18—," as the case may be.

By command of Major General Schofield:

J. C. SHELTON,  
*Adjutant General.*

An event of considerable importance and stimulus to the school was its transfer on October 20, 1890, to new quarters in the building which was initially occupied as the main building of the Ordnance Arsenal and later by Headquarters of the Department of Missouri. The removal of Department Headquarters of St. Louis made it available for the School which had outgrown its quarters in the old academic building. In reply to a letter from the school, General Sherman cordially consented to the designation of the new academic building as "Sherman Hall."

In 1891, another revision of the school regulation and the course of study took place and was published in General Orders No. 83, W. D., October 12, 1891.

The changes in the school regulations and programme of instruction made in this revision were only slight. It is noted that final examinations appeared to have grown in favor, for their weight in determining the final order of merit of the class was now increased from one-third to one-half of the term marks.

In the Department of Military Art, a new section called "Exercises in Application" was added which consisted in student preparation of essays upon military topics and studies of campaigns. In the Department of Engineering a section in "Building Superintendence" was added. In the Department of Infantry a new section specialized in "Infantry Fire Tactics." The course in Military Hygiene was given recognition as one of the coordinate departments of the school.

The annual report of the school for 1890 indicates that a considerable proportion of the instruction in military art consisted in practical exercises. The scope of these exercises, each of which was repeated several times during the year with different assignments of officers was as follows:

October 20, 1890—Outposts.

October 23, 1890—Attack formation of a company at war strength. Modern attack formation confined to Upton's tactics.

October 24, 1890—Field exercise: Advance guard opposed by small rear guard.

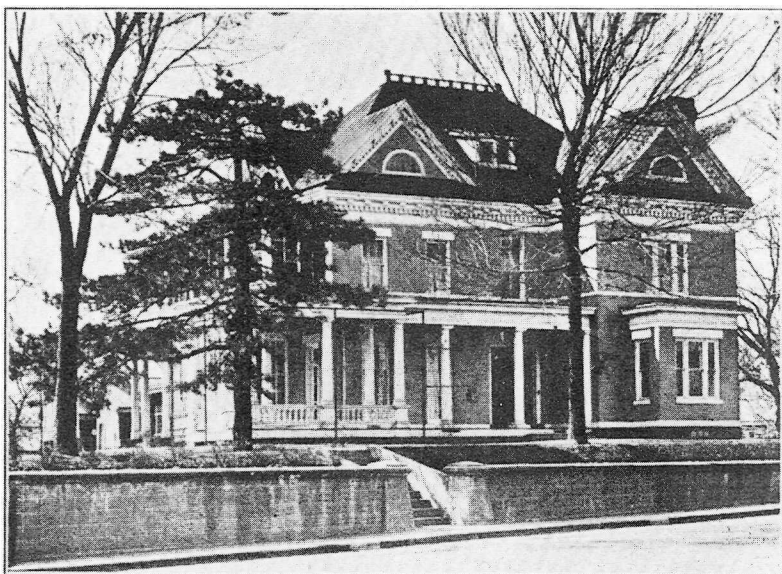
October 29, 1890—Attack and defense of a position—one side marching in advance guard formation (railroad cut)—flank attack on same, with frontal attack, etc., to hold force while flanking party works to right and rear.

November 22, 1890—Attack of a battalion of four companies on an outlined position.

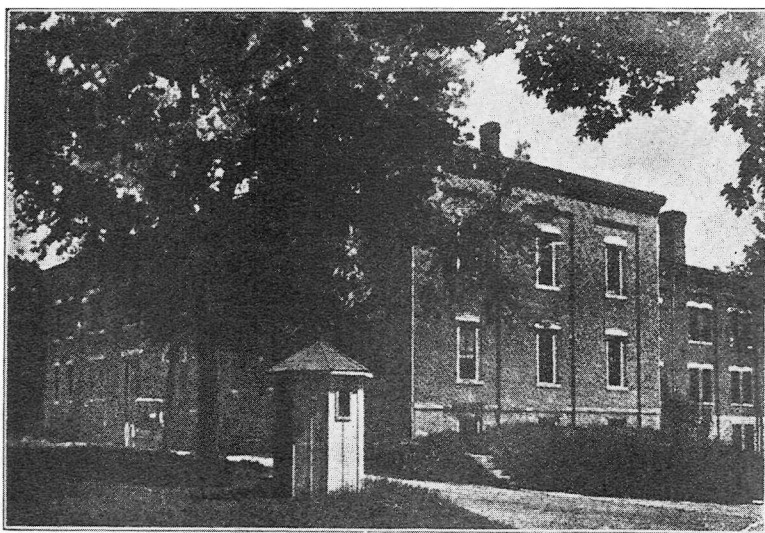
Although the above course was somewhat elementary, it constituted a distinct effort to widen the scope of the school course and to change the school from an elementary to a post-graduate institution. In order to place all members of the class on about the same basis as to fundamental preparation, those who desired to follow a preliminary course of mathematics were, in 1892, invited to report in advance for a preliminary course. By the establishment of post lyceums during this year, some of the preliminary instruction work was taken from Fort Leavenworth. In the same year, by the abolition of the daily marking system the recitations were changed to the more grown-up system of conferences led by the instructors and participated in by students and used as a basis of later practical tests.

The school now was ready for someone to visualize its larger instructional possibilities and to give it a considerable impetus. That impetus was to come largely from the mind of one of its instructors. First mention is made of this officer in Colonel E. F. Townsend's report of 1892, which says:

"Captain A. L. Wagner, 6th Infantry, one of the assistant instructors of this department is now at Cumberland, Md., by authority of the War Department, engaged in preparing a work on the subject of 'Minor Tactics,' for the use of the school and army. It is hoped that this will be ready to put in the hands of the next class."



THE COMMANDING OFFICER'S RESIDENCE IN 1937



THE HOME OF THE GENERAL SERVICE SCHOOLS IN 1890  
(The present Sherman Hall.)



The annual report of 1893 records the development of Wagner's influence in the school as follows:

"The Department of Military Art during the past year has been in charge of Captain A. L. Wagner, 6th Infantry. \* \* \* Captain Wagner has brought untiring zeal to the accomplishment of the work in his department and with the help of his able assistant instructors has been remarkably successful in the instruction of the class. The works of which he is the author, *viz*: 'Service of Security and Information,' and 'Organization and Tactics,' have been used as the text books of the course, supplemented by a small portion of 'Home's *Precis of Modern Tactics*.' This book will be dropped as soon as Captain Wagner's work is entirely completed."

Prior to 1891, nearly all of the textbooks used at the school were written by officers of foreign armies. The first text prepared at the school was written by First Lieutenant J. B. Batchelor, Jr., 24th Infantry, on *Infantry Fire—Its Use in Battle* which superseded *Infantry Fire Tactics* by Captain C. B. Mayne of the British Army. It was followed by Captain Wagner's two textbooks mentioned above. The next text was a work on *Field Engineering* prepared in the Department of Engineering under the direction of Captain W. D. Beach, 3d Cavalry. Captain W. H. Carter's work on *Hippology* soon replaced *Horses and Stables* by Lieutenant General Sir F. Fitzwygram of the British Army and *Seats and Saddles and Bits and Bitting* by Major Francis Dwyer of the Austrian Army. Soon practically all of the books used in the school were American publications. The school soon developed and has since maintained an international reputation for the excellence of its military publications.

Captain Wagner's report of the work of his Department for the year 1893 indicates its progressive nature. The following quotations from it are of special interest:

"The instruction has been by recitation, by lecture, by practical tactical exercises in the field, and tactical exercises indoors by means of the map. Only the first has been made the subject of examination, though marks have been

recorded in the third and fourth methods of instruction which will have suitable weight in determining the relative merits of the members of the class on graduation."

\*   \*   \*   \*   \*   \*   \*

"The practical tactical exercises in the field consisted of exercises with and exercises without troops."

\*   \*   \*   \*   \*   \*   \*

"The terrain rides, or field exercises without troops, are a new feature of instruction here. They are based upon similar methods of instruction in the European staff school, with such modifications as are required by the altered conditions found here."

\*   \*   \*   \*   \*   \*   \*

"The instruction in *Kriegspiel* (war game) has had in view not only the generally recognized object of that game—namely, map reading, correct estimation of the designs of an adversary, and the rapid accommodation of the player to the changing tactical conditions presented in the course of the game—but also instructions in the issuing of orders."

During 1895, the non-availability of school troops, caused Captain Wagner to resort to the use of map problems which required written solutions. As indicating the beginnings of this form of instruction which now forms the basis of the instruction methods at the school, the type problem which he presented in his annual report of 1895 is very interesting. He says, "The following is given as a specimen of the problems solved in the written exercises:

#### DEPARTMENT OF MILITARY ART

#### U. S. INFANTRY AND CAVALRY SCHOOL

Fort Leavenworth, Kansas

October 10, 1895.

#### Field Service Exercise

*Problem:* Camping arrangements of a detached brigade of all arms at a distance from the enemy.

*Situation:* At 2 p. m. today, a detached brigade of all arms coming from Missouri is approaching the eastern end of the trestle of the Missouri River Bridge at Fort Leavenworth. The command expects to rest for the night at the post, and to resume the offensive march tomorrow against an enemy reported to be between Winchester and Easton.



The command consists of:

- 1 Squadron of Cavalry,
- 1 Battery of Horse Artillery,
- 1 Brigade of Infantry,
- 1 Company of Engineers and a detachment of the Hospital Corps.

For the purposes of this problem, Fort Leavenworth is considered to be a small village without waterworks.

*Question:* 1. What are the orders of the Brigade Commander for the camping and security of the Brigade?

2. What are the orders of the Commander of the Advance Guard on the receipt of the above?

Captain Wagner continued at the head of the Department of Military Art until March, 1897. In that year the results of his four years of instruction work was embodied in the revision of the course of instruction published in General Orders No. 49, War Department, 1897.

The effect of this revision was to increase the practical instruction. Written examinations were to be held twice a year. Values of credits were assigned to instruction departments as follows:

Department of Tactics	{	Practical work -----	200
		Theoretical work -----	150
Department of Strategy	{	Practical work (essay) -----	75
		Theoretical work -----	225
Department of Engineering	{	Practical work -----	150
		Theoretical work -----	150
Department of Law		-----	100
Department of Hygiene		-----	50

The new program organized the instruction as follows:

1. DEPARTMENT OF TACTICS.—Part I, Infantry Drill Regulations; II, Small Arms Firing Regulations; III, Infantry Fire and use in Battle; IV, Cavalry Drill Regulations; V, Equitation and Hippology; VI, Field Artillery Drill Regulations; VII, Manual of Guard Duty; VIII, Troops in Campaign; IX, Security and Information; X, Organization and Tactics; XI, Practical Work in the study and application of the principles of minor tactics.

2. DEPARTMENT OF STRATEGY.—Part I, Military Policy and Institutions; II, Military Geography; III, Logistics; IV, Staff Duties; V, The Conduct of War; VI, Maneuvers on

Map and War Game; VII, Military History; VIII, Graduation Essay.

3. DEPARTMENT OF ENGINEERING.—Part I, Military Topography and Sketching; II, Field Fortifications; III, Field Engineering; IV, Signaling and Telegraphy; V, Photography.

4. DEPARTMENT OF LAW.—Part I, Military Laws; II, Constitutional Law; III, International Law; IV, Administration.

5. DEPARTMENT OF HYGIENE.—Studies in textbook on military hygiene.

The new program of instruction had scarcely become effective when, in 1898, on account of the Spanish-American War, work in the school was suspended and practically all of the officers on duty there were sent to join their regiments in the field.

This action marked the end of the primary phase of the school. It had been called into existence to meet the immediate necessity of improving the practical instruction in routine duties of the junior officers of the infantry and cavalry. The greater and more far reaching possibilities of the school soon became apparent and during the period of seventeen years of its existence those in charge had rather slowly but nevertheless surely developed it into a school for the higher training of officers in the duties of command.

The officers who graduated during these years had received great personal benefit. But due to the fact that they did not rank above the grade of lieutenant they naturally exercised little influence in their regiments and their rank was not sufficient in 1898 adequately to carry the influence of the school into war with Spain.

The Spanish-American War and the Philippine Insurrection caused a four year cessation of systematic education of the Army. However, the war furnished much opportunity for consideration of the requirements of such a system of education and it was fortunate that at its close, the problem came to as great and capable a man as Secretary of War Elihu Root. With the assistance of military advisers, conspicuous among whom were Brigadier General William H.

Carter and Brigadier General J. Franklin Bell, Mr. Root analyzed the military educational needs of the Army. In his annual report for 1901, under the head of "Military Instruction," he said:

"Existing conditions make this subject one of primary importance at the present time \* \* \*. In the reorganization of the enlarged army about 1000 new officers have been added from the volunteer force, so that more than one-third of all the officers of the army have been without any opportunity whatever for systematic study of the science of war. On the other hand, the rapid advance of military science; changes of tactics required by the changes in weapons; our own experience in the difficulty of working out problems of transportation, supply, and hygiene; the wide range of responsibilities which we have seen devolving upon officers charged with the civil government of occupied territory; the delicate relations which constantly arise between military and civil authority; the manifest necessity that the soldier, above all others, should be familiar with the history and imbued with the spirit of our institutions—all indicate the great importance of thorough and broad education for military officers.

"It is a common observation, and a true one, that practical qualities in a soldier are more important than a knowledge of theory. But this truth has often been made the excuse for idolence and indifference which, except in rare and gifted individuals, destroyed practical efficiency. It is also true that, other things being equal, the officer who keeps his mind alert by intellectual exercises, and who systematically studies the reasons of action and the materials and conditions and difficulties with which he may have to deal, will be the stronger practical man and the better soldier.

"I cannot speak too highly of the work done in our service schools for a number of years before the war with Spain. It was intelligent, devoted, and effective, and produced a high standard of individual excellence, which has been demonstrated by many officers in the active service of the past four years. There was, however, no general system of education. The number of officers who could avail them-

selves of the very limited accommodations afforded was comparatively small. The great body of officers were confined to the advantages, offered by the post schools, called "Lyceums" which were, in general, unsatisfactory and futile. There was no effective method by which the individual excellence demonstrated could be effectively recognized, or the results attained be utilized."

As a result of the study given to the requirements of military education, a general scheme of instruction was adopted for the Army and published in General Orders No. 155, War Department, 1901. This scheme provided that much of the preliminary instruction which formerly had been included in the Fort Leavenworth curriculum should now be included in systematically organized and efficiently conducted post schools. The next step in the education of officers of all branches exhibiting superior merit in the post schools was to be attendance at the Fort Leavenworth School which was to be enlarged and developed along the lines of a post-graduate college under the designation, "The General Service and Staff College." The final step in the school instruction of selected officers was also provided for in these general orders which required the college staff, upon conclusion of the annual examinations, to recommend such student officers as had especially distinguished themselves, for further instruction at the Army War College which had been established in Washington, D. C.

The regulations for the General Service and Staff College, together with a suitable program of instruction, was published in General Orders No. 89, War Department, August 1, 1902. A one-year course of instruction was provided for. The College reopened as directed, the new class numbering twenty-nine cavalry and sixty-four infantry officers. The student rank continued to be that of lieutenant and it was not until 1907 that it was raised to captain.

In 1904 it seemed advisable to cover the complete work of the school in two years, the work of the first year to come under the designation, *The Infantry and Cavalry School* and the work of the second year under *The Staff College*. In addition a *Signal School* was to be established at Fort Leavenworth. All this was provided for in General Orders No.

115 of that year. Major General J. Franklin Bell, who was designated as Commandant, brought great interest, energy, and ability to the school. He generously gave much credit to Lieutenant Colonel Arthur Wagner for assistance in the preparation of the reorganization plans. Lieutenant Colonel Wagner was ordered to Fort Leavenworth to head the work of instruction with the title of Assistant Commandant, but early in 1904 he was transferred to General Staff duty.

In 1905, General Orders No. 140, War Department, provided another revision of the instruction program and again the basic school was named *The United States Infantry and Cavalry School*. In 1907, General Orders No. 211 changed the name to *The Army School of the Line*.

And so the schools continued to perform their excellent work under the impetus given to it by General Bell and Colonel Wagner, and under the remarkable instructional leadership of Colonel John F. Morrison through the years leading up to the World War. High command and staff work was emphasized more and more and to the extent that prevision was possible, preparation was made for the work which Fort Leavenworth graduates were to perform during the World War. During these years, the personalities of Wagner and of Morrison provided a student enthusiasm in the work which was quite beyond the ordinary, and their work was ably extended by many excellent instructors.

From the beginning of the Fort Leavenworth School, those who visualized its possibilities desired that its graduates should exercise a wide influence upon Army training. However, it was not until 1907 that the rank of student officers was fixed sufficiently high to insure that they would exercise considerable authority after graduation.

Concerning this new policy, Major General J. Franklin Bell, in his annual report said:

"The policy that has been announced and which goes into effect with the incoming class, of detailing your ranking majors and old ranking captains as student officers here is one that is bound to give general satisfaction, and will result in immense benefit not only to the officer detailed, but to the army at large. \* \* \* The detailing of lieutenants for instruction here has been, in my opinion, a mistake, not

for the reason that the officer detailed did not receive immense personal benefit and professional knowledge, but because after graduation they were never, or very rarely, able to put this newly acquired information into practice, either in their companies or regiments."

The policy of giving preference to Fort Leavenworth graduates in detailing military instructors to the colleges was a forward step in utilizing their services. In 1904, General Bell extended the influence and prestige of the school by causing the fifteen graduates of the current Staff College Class to be sent to the extensive maneuvers held that year at Manassas, Virginia, where they performed superior service as umpires.

In the Vera Cruz expedition in 1914, we find many Fort Leavenworth men in responsible positions. But it was not until the World War that Fort Leavenworth graduates found themselves filling the very positions which Bell, Wagner, Morrison, and others had believed they would some day be called upon to fill and for which these leaders in instruction had prepared them.

Again, when the Pershing expedition was sent into Mexico, we find that several important members of his staff were graduates of the Fort Leavenworth School.

When in 1917, the tolerance of our people broke, and they sent General Pershing with a staff of selected officers to Europe to prepare the way for the coming of a great army, several important members of this staff were graduates of Fort Leavenworth and from that time on, the comparatively small group of available Fort Leavenworth graduates were carefully placed in key positions where they might influence and direct the largest numbers. They came into the command of brigades and divisions. They served in high staff positions. A roster of the First Army at St. Mihiel and in the Argonne shows the names of many graduates from Fort Leavenworth. They served at General Headquarters both in the United States and in France. They organized and conducted great schools modeled on the one they had attended at Fort Leavenworth.

When General Pershing demanded an American Army in an American Sector in France, he relied upon the Fort

Leavenworth graduates to carry the project through. That they fulfilled his expectations is shown by a statement which he made in an address at the Army War College on September 2, 1924. On this occasion he said:

"During the World War, the graduates of Leavenworth and the War College held the most responsible positions in our armies, and I should like to make it of record, that, in my opinion, had it not been for the able and loyal assistance of the officers trained at these schools, the tremendous problems of combat, supply, and transportation could not have been solved."

The experience derived in the World War enabled our Legislators, assisted by the General Staff of the Army, to write into our laws the National Defense Act of 1920, which as time passes is receiving greater and greater approval from our people. This law provided for the organization and training of a great United States Army with three components—the Regular Army, the National Guard, and the Organized Reserves. It provided for a great system of progressive military education for the officers of this Army which should have its beginnings in West Point, the Reserve Officers Training Corps of the schools and colleges, and in the basic schools in the organizations of the Regular Army and the National Guard. Then there developed the Branch or Special Service Schools with courses both basic and advanced. With proper periods of service with troops between the periods of school attendance, selected officers were to go to the Army School of the Line and the General Staff College at Fort Leavenworth and finally, after a further selection, some were to attend the Army War College at Washington, D. C.

Out to Fort Leavenworth to effect the reorganization of The General Service Schools came Major General Charles H. Muir and Colonel LeRoy Eltinge with their World War experience, and especially Colonel Hugh A. Drum, with the experience of Chief of Staff in the First American Army which had with great distinction won the great victories of St. Mihiel and the Meuse-Argonne. Also there came many other officers whose war service as commanders of divisions,

artillery and infantry brigades, chiefs of staff, and heads of important staff sections was still vivid. These officers built a great new school, organizing it for instruction along the lines of staff organization which General Pershing had used in France and which he had brought back and installed in War Department Headquarters in Washington and in each of the Corps Area Headquarters. This organization was built around four groups corresponding to the four principal sections of the staff of a military organization, namely: Administration, Military Intelligence, Military Operations, and Supply. The work of organization of the school was so well done that changes have been few during the years following the World War.

The War developed so rapidly and involved such increasingly great numbers of men, new weapons, and seemingly new phases of warfare, that during its progress the instruction of our officers was of necessity based upon the writings of foreign officers. One of the great accomplishments of the leaders and faculty of The General Service Schools during the period of reorganization was the preparation of a complete series of military texts, in which the teachings were distinctly American in character. There were a large number of these new texts, including studies in the tactics and technique of the various arms; in the principles and decisions involved in handling the division, the corps, and the army; and in duties connected with command, staff, and supply.

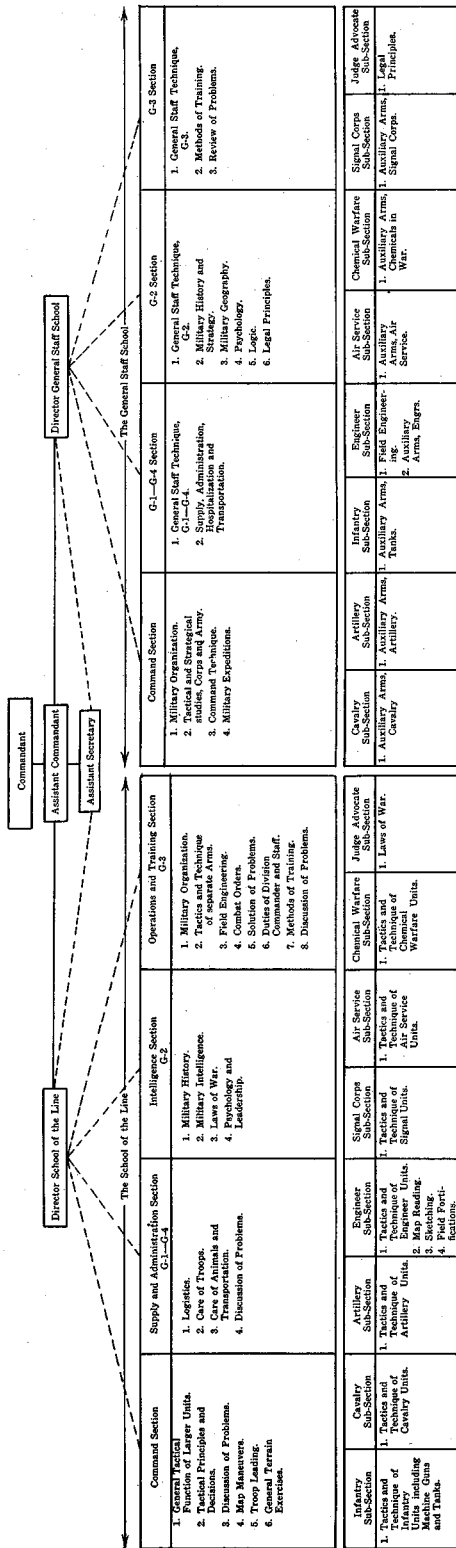
By 1922 the school had reached a stage in its organization which seemed to meet the approval of those who had studied the lessons of the World War. Its curriculum at that time furnishes an interesting comparison with the beginnings of the school and with its development through the years.

The chart facing the page indicates the instructional organization of the school in 1922.

The following summary shows apportionment of time to subjects in the School of the Line Course, 1922-1923:



CONTROL CHART FOR INSTRUCTIONAL SUBJECTS  
THE GENERAL SERVICE SCHOOLS





**THE SCHOOL OF THE LINE, 1922-1923**  
(SUMMARY OF COURSE)

	<i>Subject</i>	<i>Con- fer- ences</i>	<i>Lec- tures</i>	<i>Map Prob- lems</i>	<i>Ter- rain Exer- cises</i>	<i>Tac- tical Rides</i>	<i>Map Ma- neuvers etc.</i>	<i>Total Per- iods</i>
1	Opening of School	3						3
2	Military Organ- ization	2	8					10
3	Combat Orders	4	1	3		1	6 (a)	17
4	Solution of Problems	3	2				1	6
5	Tactics and Techn- ique of Separate Arms	67	3	5	7	9		91
6	Field Engineering	23	1	4	3	8		39
7	General Tactical Functions of Larger Units	15	1					16
8	Tactical Principles and Decisions	102	2	18				122
9	Discussion of Problems	7	3					10
10	Map Maneuvers						8	8
11	Division Com- mand, Staff, and Logistics	33	2	7 (a)		1	3 (b)	54
12	Military History		44	1				45
13	Military Intel- ligence	6		1		1		8
14	Troop Leading— Infantry	39	1	10				50
15	Troop Leading— Cavalry	10		2				12
16	Methods of Training	13		1				14
17	Laws of War		4					4
18	Psychology and Leadership		7					7
19	General Terrain Exercises				18			28
20	Vacant Periods	9						9
	Total	336	79	52	28	20	18	553

Equitation: 60 exercises from November to March, inclusive.  
(a) 1 all day. (b) 3 all day.

The table below shows the apportionment of time in the General Staff School for the same year :

**THE GENERAL STAFF SCHOOL, 1922-1923**  
(SUMMARY OF COURSE)

	<i>Con- fer- ences</i>	<i>Lec- tures</i>	<i>Dis- cus- sions</i>	<i>Half-days</i>
1. Military Organization.....	2			
2. Auxiliary Arms, Corps and Army:				
(a) Cavalry.....	10	3	2	4
(b) Artillery.....	12		4	13
(c) Tanks.....	1	1	1	1
(d) Chemicals in War.....	4	1	2	3
(e) Air Service.....	9		1	2
(f) Engineers.....	6		2	4
(g) Signal Corps.....	2	3	2	2
3. Command and General Staff Technique.....	10	15	3	29
4. Logistics of Larger Units.....	24	2	5	17
5. Legal Principles.....	5	7	2	3
6. Strategy.....	9			
7. Tactical and Strategical Principles.....	52		15	54
8. Field Engineering.....	10	1		12
9. Military History.....	42	2	9	15
10. Methods of Training.....	3			
11. Review of Line Class Problems.....				5
12. Military Geography.....	7		1	6
13. Minor Expeditionary Forces.....	1	3	2	11
Total for the course.....	209	38	51	181

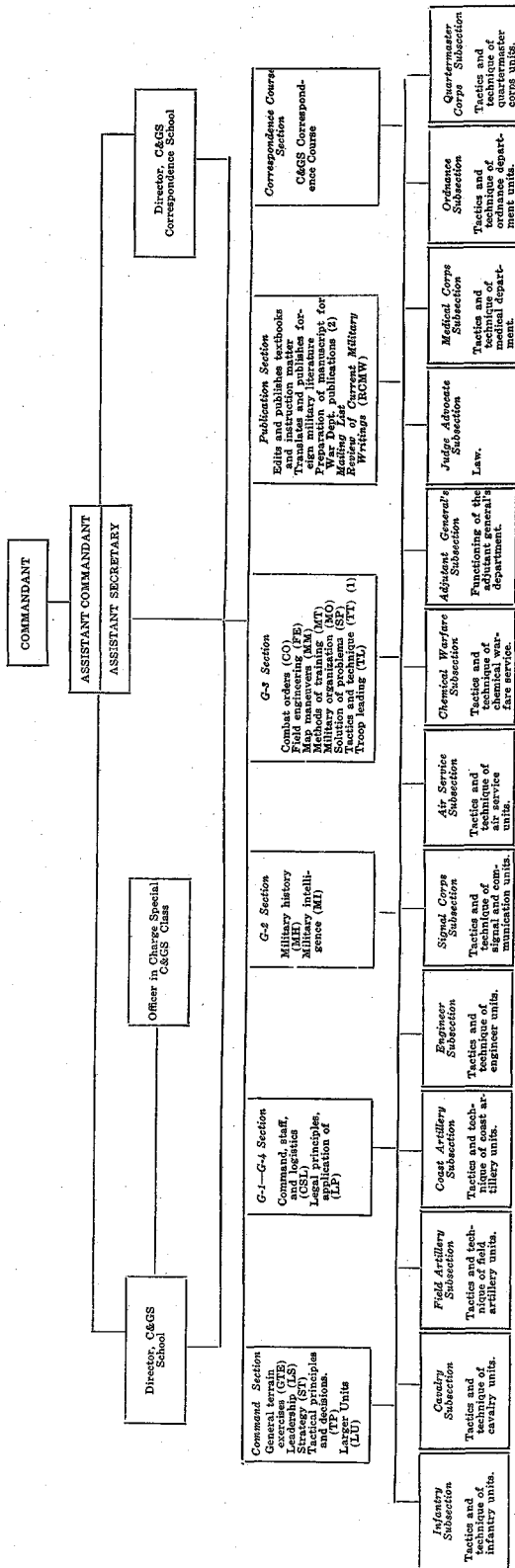
In 1923, the War Department deemed it advisable to graduate annually an increased number of officers from Fort Leavenworth. The Army School of the Line and the General Staff School were discontinued, and the General Service Schools covering a one year course, was established in their stead. Part of the work covered in the General Staff School was transferred to the Army War College and part to The Command and General Staff School.

In 1924, the Special Command and General Staff Course for Officers of the National Guard and Organized Reserves was established.

Beginning with the school year 1928-1929 the course of instruction was changed from one year to two years. At the same time the designation of the schools was changed from the General Service Schools to The Command and

# ASSIGNMENT OF INSTRUCTION SUBJECTS

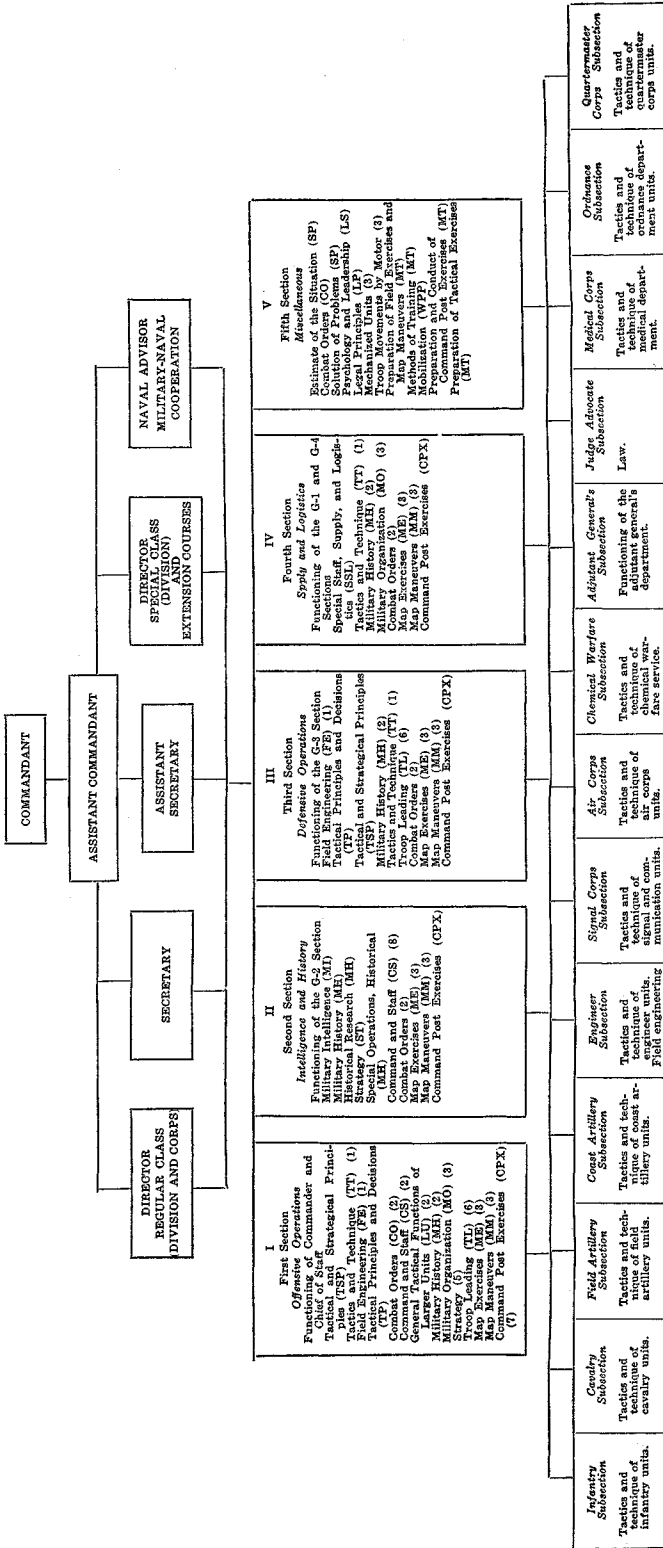
THE GENERAL SERVICE SCHOOLS  
Fort Laramie, Kansas  
1898-1927



NOTES:

- (1) General coordination.
- (2) Under direct supervision of Director, C&GS Corresponding School.

The Command and General Staff School, Fort Leavenworth, Kansas, 1936-1937



General Staff School and the designation of the Command and General Staff Correspondence School was changed to the Command and General Staff Extension Course. The demand for an increased number of graduates again resulted in changing the length of the course of instruction from two years to one year, beginning with the school year 1935-1936.

The charts opposite the page show the organization of the School for the school years 1926-1927 and 1936-1937. The program of instruction which was followed during the year 1925-1926 and the year 1936-1937 are shown on pages 160-168.

**PROGRAM OF INSTRUCTION  
THE COMMAND AND GENERAL STAFF SCHOOL, 1925-1926**

**COMBAT ORDERS**

<i>Subject</i>	<i>Conferences</i>	<i>Lectures</i>	<i>Map Problems</i>	<i>Terrain Exercises</i>	<i>Tactical Rides</i>	<i>Map Maneuvers and Exercises</i>	<i>Total Periods</i>	<i>Total Half-days</i>
Field orders.....	2					1		
Administrative orders.....	1					1		
Oral and dictated orders.....		1				3		
<b>Total.....</b>	<b>3</b>	<b>1</b>	<b>2</b>			<b>5</b>	<b>4</b>	<b>7</b>

**COMMAND, STAFF, AND LOGISTICS**

Theater of operations.....	2							
Division commander and general staff.....	1	3						
Division technical and administrative staff.....	4							
Division transportation.....	1							
Division on a march.....	3							
Division mobilization.....	1							
Division in attack.....	3							
Division in defense and in a rest area.....	1							
Road circulation.....	1							
Division in relief.....	1							
Division in retirement.....	2							
Division in pursuit.....	1							
Expeditionary force.....	1							
Supply of a cavalry division.....	1							
Division movements by motor transport.....	2							
Division movements by rail.....	2							
Division in defense of a river line.....	1							
Corps commander and general staff.....	1							
Detached corps—Logistics in general.....	1							
Detached corps on the march.....	1							
Detached corps in attack.....	2							
Detached corps in defense.....	2							
Corps movement by marching and motor transport.....	2							
Command and staff duties in movements by rail and motor transport.....		1						
Supply in past wars.....		1						
Corps area command and general staff.....		1						
Explanation and discussion of map maneuvers.....		15						
<b>Total.....</b>	<b>37</b>	<b>11</b>	<b>7</b>				<b>48</b>	<b>7</b>



## DISCUSSION OF PROBLEMS

<i>Subject</i>	<i>Conferences</i>	<i>Lectures</i>	<i>Map Problems</i>	<i>Terrain Exercises</i>	<i>Tactical Rides</i>	<i>Map Maneuvers and Exercises</i>	<i>Total Periods</i>	<i>Total Half-days</i>
Discussion MP 2 Series II.....		1						
Discussion MP 5 Series II.....		1						
Discussion MP 3 Series III.....		1						
Discussion MP 1 Series IV.....		1						
Discussion MP 4 Series III.....		1						
Discussion MP 2 Series IV.....		1						
Discussion MP 7 Series II.....		1						
Discussion MP 8 Series II.....		1						
Discussion MP 9 Series II.....		1						
Discussion MP 11 Series II.....		1						
Discussion MP 12 Series II.....		1						
Discussion MP 13 Series II.....		1						
Discussion MP 14 Series II.....		1						
Discussion MP 15 Series II.....		1						
Discussion MP 17 Series II.....		1						
Discussion MP 19 Series II.....		1						
Discussion MP 21 Series II.....		1						
Discussion MP 22 Series II.....		1						
Discussion MP 7 Series III.....		1						
Discussion MP 25 Series II.....		1						
Total.....		20						

## FIELD ENGINEERING

Aerial photography.....	2							
Field fortification.....	13				5			
<hr/>								
Total.....	15		4		5		15	9

## MAP MANEUVERS

Air service.....						1		
Infantry regiment.....						1		
Cavalry brigade.....						1		
Infantry brigade.....						2		
Infantry Division.....						3		
G-2—G-3, Division.....						2†		
G-1—G-4, Division.....						2†		
Division commander and staff.....						1°		
Corps.....						3°		
Corps and division command and staff.....						1†		
<hr/>								
Total.....						17		

†1 dall day.

°All day.

†All night and all day.

## METHODS OF TRAINING

<i>Subject</i>	<i>Conferences</i>	<i>Lectures</i>	<i>Map Problems</i>	<i>Terrain Exercises</i>	<i>Tactical Rides</i>	<i>Map Maneuvers and Exercises</i>	<i>Total Periods</i>	<i>Total Half-days</i>
General principles.....	1							
Forces subject to training and training of forces.....	1							
Corps area training order.....	1							
Division training order.....	1							
Methods of imparting instruction.....	1							
Preparation of problems and exercises.....	1							
Preparation and conduct of map maneuvers.....	1							
Preparation of map problems, terrain exercises, and tactical rides.....	1							
Preparation and conduct of field exercises.....	1							
Preparation and conduct of field maneuvers.....	1							
Preparation and conduct of a continuous field maneuver.....	1							
Umpiring.....	1							
Army correspondence courses.....	1							
Mobilization, training, and plans for division, corps, and corps area headquarters.....	1							
Total.....	14		2				14	2

## MILITARY HISTORY

Introduction to course.....		1						
Historical research (Doneison).....	3	1						
World War.....		19						
Methodology.....		3						
Total.....	3	24	1				27	1

## MILITARY ORGANIZATION

General principles of organization of combat units and staffs.....		1						
Infantry division.....	2							
Cavalry division.....	1							
General principles of corps and army organization.....	1							
Corps and army artillery.....		1						
Total.....	4	2					6	

## SOLUTION OF PROBLEMS

<i>Subject</i>	<i>Conferences</i>	<i>Lectures</i>	<i>Map Problems</i>	<i>Terrain Exercises</i>	<i>Tactical Rides</i>	<i>Map Maneuvers and Exercises</i>	<i>Total Periods</i>	<i>Total Half-days</i>
Estimate of situation.....	1							
Mechanics of solving problems.....		1						
Illustrative problem.....	1							
Solution of a map problem.....						1		
Discussion of solution.....		1						
Total.....	2	2				1	4	1

## TACTICAL PRINCIPLES AND DECISIONS

Marches.....	2							
Reconnaissance and security.....	6							
Change of direction of march.....	1							
Halts and security.....	1							
General discussion of offensive combat.....	3							
General discussion of defensive combat.....	3							
Development for combat.....	1							
Meeting engagements.....	5							
Attack against and defense of a position.....	8							
Attack against and defense of a zone.....	10							
Counterattacks.....	1							
Relief of units in battle.....	2							
Delaying actions.....	1							
Withdrawal from action.....	3							
Retirements.....	1							
Pursuits.....	2							
Position in readiness.....	1							
Attack and defense of a river line.....	3							
Passage of defiles.....	2							
Raids.....	1							
Night operations.....	2							
Convoys and protection of supply routes.....	1							
Overseas expeditions.....	4							
Defense of a coast line.....	2							
Cavalry marches.....	1							
Halts and security at a halt.....	1							
Cavalry on reconnaissance.....	1							
Counterreconnaissance by cavalry.....	1							
Cavalry in offensive combat.....	1							
Cavalry in defensive combat.....	1							

## TACTICAL PRINCIPLES AND DECISIONS—Continued

Subject	Conferences	Lectures	Map Problems	Terrain Exercises	Tactical Rides	Map Maneuvers and Exercises	Total Periods	Total Half-days
Cavalry in delaying action	1							
Cavalry covering a flank of battle	1							
Cavalry covering a retirement	1							
Exploitation of a breakthrough by cavalry	1							
Cavalry in pursuit	1							
Cavalry raids	1							
Aerial regulations	1							
The air division in attack on lines of communication	1							
The air division in coast defense	1							
The air division in supply of an attack by an army	1							
The air division in support of a withdrawal	1							
The air division in an attack on a hostile air force	1							
The air division in support of an army on the defensive	1							
The air service covering the concentration of an army	1							
The detached corps	7	(5 double periods)						
The strategic advance guard	2							
Plan of campaign	1							
Plan of concentration	1							
The corps in army	9	(7 double periods)						
Total	106	25*					130	25

\*4 all day.

## TACTICS AND TECHNIQUE

Infantry	10	1			1		11	1
Artillery	11				2		11	2
Cavalry	5	1			1		6	1
Air service	5	1					6	
Signal troops	2						2	
Engineers	2						2	
Chemical warfare service	2	1					3	
Medical service	2						2	
Total	39	4	4	5	4		43	4

**TACTICS AND TECHNIQUE, AUXILIARY ARMS, CORPS, ARMY,  
GENERAL HEADQUARTERS RESERVES**

<i>Subject</i>	<i>Conferences</i>	<i>Lectures</i>	<i>Map Problems</i>	<i>Terrain Exercises</i>	<i>Tactical Rides</i>	<i>Map Maneuvers and Exercises</i>	<i>Total Periods</i>	<i>Total Half-days</i>
Cavalry.....	2							
Artillery.....	9							
Air service.....	4	1						
Tanks.....		1						
Coast and harbor defense.....	1							
Engineers.....	6	1						
Signal troops.....	2	1						
Chemical warfare service.....	2							
Medical service.....	1							
<b>Total.....</b>	<b>27</b>	<b>4</b>	<b>6</b>				<b>31</b>	<b>6</b>

**TROOP LEADING**

Explanation and outline of the course.....		1						
Infantry division in attack and pursuit.....	12							
Infantry division in defense.....	8							
Cavalry division.....	3							
<b>Total.....</b>	<b>23</b>	<b>1</b>	<b>8</b>				<b>24</b>	<b>8</b>

**MISCELLANEOUS**

Opening exercises.....		3					3	
Address by assistant commandant.....		1					1	
Strategy.....		10					10	
Map maneuvers.....						16*	18	16
Military intelligence.....	5	3					8	1
Legal principles, application of.....	6	3					9	1
Leadership.....		11					11	
General terrain exercises.....				18			15	14
<b>Total.....</b>	<b>11</b>	<b>31</b>	<b>2</b>	<b>18</b>		<b>16</b>	<b>75</b>	<b>32</b>

\*6 all day.



[illegible]

Parenttheses indicate instruction given under a different heading.

b. By section assignment.\*

Section	Symbol	Subject Matter	Confer- ences	Lectures	Map Maneu- vers	Map Exercises	Tactical Rides	Prelim- inary Work Command Post Exercises	Command Post Exercises	Exercises	Periods	Hours
First	I	Offensive Operations Command Post Exercises	8	1	5 (1)	15	5	5	1	.....	40	408½ (11)
Second	II	Military Intelligence Military History Historical Research Special Operations	75	2	..... (6)	2 (27)	.....	..... (5)	..... (1)	.....	79	90½ (210)
Third	III	Defensive Operations Marches Reconnaissance Security Counteroffensive Lines of Communication	8	1	1 (5)	20	4	..... (5)	..... (1)	.....	34	253 (185)
Fourth	IV	Supply Evacuation Logistics	16	3	..... (6)	7 (22)	.....	..... (5)	..... (1)	1	27	62 (264)
Fifth	V	Mechanized Units Motorization Banks Methods of Training Combat Orders Solution of Problems Mobilization Legal Principles	23	2	..... (6)	5 (27)	.....	..... (5)	..... (1)	2	32	65 (238)
Sub- sec- tions	Abbre- viation of Title	Tactics and Technique of the Separate Arms	31	5	.....	4	1	.....	.....	2	43	73½
		Totals.....	161	14	6	53	10	5	1	5	255	952½

\* Map Problems, Terrain Exercises, Discussion of Problems, Committee Meetings, and Equitation are omitted from this table. The above table shows the periods assigned to Sections and Subsections. In most Map Exercises and Map Maneuvers and in the Command Post Exercises, all Sections and Subsections take part.

Parentheses indicate periods and hours in which a section participates in work assigned to another section.



Interesting progress in the nature and scope of the map problems solved by the student officers is seen by comparing the map problem on page 148, which is a type of those used in 1895 when this form of applicatory instruction was first introduced in the School, with the following problems solved by the Classes of 1925-1926 and 1936-1937:

## THE GENERAL SERVICE SCHOOLS

Fort Leavenworth, Kansas

### THE COMMAND AND GENERAL STAFF SCHOOL

1925-1926

#### TROOP LEADING

#### Map Problem No. 1—Series V

16 February, 1926

	Paragraphs
SECTION I.—Situation and First Requirement .....	1-3
II.—Second Special Situation .....	4-6
III.—A Solution of Second Requirement .....	7
IV.—Discussion .....	8-10
V.—Comments on Solutions .....	11-12

#### SECTION I

#### Situation and First Requirement

	Paragraph
General situation .....	1
Special situation (Blue) .....	2
First requirement .....	3

1. GENERAL SITUATION.—*a.* General Map, Gettysburg (1925), 1 inch = 5 miles. Topographical Map, Gettysburg-Antietam (1925), 1:21,120; Hunterstown, New Oxford, Gettysburg, Bonneauville, and Kingsdale sheets.

*b.* The Pennsylvania-Maryland state line forms part of the boundary between two states, Red (north) and Blue (south), which are at war. A Red army is concentrating in the area: Lancaster—Lebanon—Harrisburg, and has advanced a corps west of the Susquehanna River. A Blue army has completed its concentration north of Baltimore and, advancing on the front: Belair—Hampstead, has

crossed the international boundary with its main forces. The bulk of the cavalry of both armies is engaged east of the Susquehanna River.

c. The forces of both states are well equipped, supplied, and trained, and have similar divisional organization.

2. SPECIAL SITUATION. (BLUE).—*a.* The 1st Division, with the 101st Field Artillery (155-mm. howitzer) attached, operating under army control, with the mission of covering the left of the army, bivouacked for the night, 21-22 June, 1925, in the vicinity of Silver Run (village).

*b.* During the afternoon of 21 June, Major General A, commanding the 1st Division, received the following information and instructions from the army commander:

(1) The Red force now west of the Susquehanna River consists of about one corps of four divisions with normal corps artillery. About three divisions and the corps artillery are disposed for defense of the general line: Loganville (399.0-753.0)—Pigeon Hills (375.0-755.0). The remaining division of the Red corps moved south from the vicinity of Carlisle today (21 June), and is bivouacked in the vicinity of Center Mills.

(2) Reliable reports indicate that the remainder of the Red army will begin crossing the Susquehanna River on 23 June.

(3) The Blue army continues its advance, driving back the Red corps, with a view to attacking while the Red army is still astride the Susquehanna River.

(4) The left of the Blue main forces, moving from the vicinity of Hanover along the Baltimore-Hanover Road, and the Carlisle-Baltimore Pike, will reach the Lincoln Highway tomorrow, 22 June, and advance on York Springs on 23 June.

(5) The 1st Division will continue its present mission, moving tomorrow, 22 June, to the vicinity of Hunterstown, prepared to continue its advance on 23 June to the vicinity of Idaville.

(6) The 1st Squadron, 1st Cavalry, moving from the vicinity of Bandanna, will reach Bonneauville by dark today and be attached to the 1st Division.

c. (1) In compliance with the foregoing instructions the 1st Division marched at daylight, 22 June, in two columns as follows:

<i>West Column</i>	<i>East Column</i>
(a) Route: Littlestown—Whitehall—Bonneauville—Granite Hill—Hunterstown.	Route: Lefevre—Washington Meeting House—Centennial—Cedar Ridge—Hunters-town.
(b) Troops in order of march:	Troops in order of march:
Advance guard:	Advance guard:
3d Infantry, less 3d Battalion:	1st Infantry, less 3d Battalion;
1st Battalion, 2d Field Artillery;	1st Battalion, 1st Field Artillery;

Company D, 1st Engineers;  
1st Collecting Company, less  
one platoon;  
2d Platoon, 1st Ambulance  
Company, less ambulances  
distributed to troops in  
main body.

Distance:  
1200 yards.

Main body:  
Headquarters, 2d Brigade;  
3d Battalion, 3d Infantry;  
2d Field Artillery, less 1st  
Battalion and Combat  
Train, 2d Battalion;

4th Infantry;  
2d Battalion, 1st Engineers,  
less Company D;  
Combat Train, 2d Battalion,  
2d Field Artillery.

Company A, 1st Engineers;  
1st Platoon, 1st Collecting  
Company;  
1st Ambulance Company, less  
one platoon and ambu-  
lances distributed to troops  
in main body.

Distance:  
1200 yards.

Main body:  
Headquarters, 1st Brigade;  
3d Battalion, 1st Infantry;  
1st Field Artillery Brigade,  
less 1st Battalion, and  
Combat Train, 2d Bat-  
talion, 1st Field Artillery;  
2d Field Artillery; and 1st  
Ammunition Train;  
2d Infantry;  
1st Engineers, less Company  
A and 2d Battalion;  
Combat Train, 2d Battalion,  
1st Field Artillery;  
101st Field Artillery;  
1st Tank Company.

(2) Field and service trains were directed to move to Littlestown and await orders.

(3) The 1st Squadron, 1st Cavalry, starting its move-  
ment at 2:00 AM on account of unusual activity in the Red  
bivouac areas near Center Mills, covered the march of the  
1st Division.

(4) The 1st Division Air Service was operating from  
a corps airdrome in the vicinity of Hampstead (385.5-722.5).

*d.* During the morning of 22 June, the situation de-  
veloped as follows:

(1) At 3:50 AM, the Air Service reported two hostile  
columns of infantry and artillery moving south, one by the  
road: crossroads 609-C (355.5-764.0)—crossroads 514-A,  
and the other by the road: Center Mills—Benders Church;  
leading elements of both columns crossing Conewago Creek  
at 3:40 AM.

(2) At 4:00 AM, the cavalry, northwest of Hunters-  
town, commenced a series of delaying actions which resulted  
in decreasing the rate of advance of the Red columns.

(3) By 4:30 AM, the air service had reported the hos-  
tile columns as being about a reinforced brigade each and  
moving from the bivouac near Center Mills.

(4) By 7:00 AM, the route of the hostile east column was reported as: Plainview—Woodside School—Hunters-town, and the west columns as Benders Church—road junction 550-B (354.1-757.9)—R. Smith (353.5-756.9—Granite Hill. The advance guard of each column consisted of about a battalion of infantry and a battery of light artillery. No tractor-drawn artillery accompanied the Red Force.

(5) At 7:30 AM, the 1st Squadron, 1st Cavalry, attacked by the advance guards of both hostile columns, retired to the southeast from the line: F. Stroudt (359.3-756.3)—Granite Hill.

(6) At 8:10 AM, the advance guard of the Blue west column gained contact with the advance guard of the hostile west column just south of road junction 570-B (358.1-750.4) and, by 8:45 AM, had driven it back to the line: woods just southeast of road junction 597-B (358.3-752.5)—woods at (356.6-751.3), upon which line the Red advance guard was supported by an additional battalion.

(7) At 8:20 AM, the advance guard of the hostile east column started deploying and, by 8:45 AM, is on the line: eight hundred yards northeast of Moritz School—woods at (359.2-752.4).

(8) At 8:45 AM, infantry at the heads of the Red main bodies is assembling in the woods in the vicinity of Shelby (357.7-755.4) and road junction 602-D (356.2-753.7); the two Red advance guard batteries are firing from positions eight hundred yards west of E. Hoyle and just northwest of Granite Hill (village); the remainder of the Red main bodies is still in march.

(9) Red air service is active.

*e.* At 8:45 AM, the 1st Division is disposed as follows:

(1) The 1st Squadron, 1st Cavalry, less one platoon, is at Cedar Ridge; one platoon is in the vicinity of Rocky Grove School. Patrols are in contact with both Red columns.

(2) Leading elements of the advance guard of the east column have just passed crossroads 557-B (362.0-750.9); the head of the main body is three hundred yards south of road junction 514-A (366.9-747.6).

(3) The support of the advance guard of the west column is deployed on the line: woods just south of road junc-

tion 582-B (358.8-751.8)—orchard on nose three hundred yards west of road junction 579-A—woods at (356.6-750.2) ; the reserve is in the woods one thousand yards northeast of Mt. Vernon School; the advance guard artillery is firing from the vicinity of hill 627 and I. Rubisill. The head of the main body of the west column is halted at road junction 629-B (three hundred yards southeast of St. Luke's Church).

(4) The command post of the division is at Silver Run (village).

f. (1) At 8:45 AM, Major General A, accompanied by his chief of staff, G-2, G-3, an aide, the division signal officer, a stenographer, General "Artillery Brigade," and General "Second Brigade," is at Bonneauville and has just received information that the advance of the left division of the Blue main forces is strongly opposed just north of Hanover.

(2) Major General A and the officers with him are familiar with the situation as it exists at 8:45 AM.

g. The weather is clear; roads and terrain, dry; and all streams shown on topographical map, fordable at all points by all arms without difficulty.

3. FIRST REQUIREMENT.—Actions taken and orders as actually issued by Major General A between 8:45 AM and 9:40 AM, 22 June, 1925.

#### NOTE

Solutions will be turned in by 3:15 PM.

## SECTION II

### Second Special Situation

	Paragraph
A solution of the first requirement .....	4
Special situation (Blue), continued .....	5
Second requirement .....	6

4. A SOLUTION OF FIRST REQUIREMENT.—a. At 8:45 AM, General A, at Bonneauville, directs his chief of staff:

"The division will develop under cover southeast of the general line: crossroads 582-C (363.4-753.5)—road junction 604-B (361.2-750.3)—hill 627 (360.0-748.4)—Sweet Home School, for attack.

"The advance guard of the right column will secure the line: nose of ridge at (361.7-754.3)—crossroads 573-C—nose of ridge at (360.1-751.7). The advance guard of the left column will hold its present position. Operations of the advance guards beyond the line just indicated will be restricted to reconnoitering patrols. In case of attack this line will be held.

"The 1st Brigade will assemble in the area: D. Holcomb—hill 609—road junction 489-A—S. A. Smith; the 2d Brigade, in the area: road junction 604-B—woods four hundred yards south of F. X. Noel—Store.

"Artillery has priority on roads.

"The 1st Squadron, 1st Cavalry, will cover our flanks and locate the flanks of the hostile deployment. The cavalry now at Cedar Ridge, when relieved by infantry, will operate from the vicinity of P. Murray (363.4-756.8).

"Service trains are released.

"The division command post will be moved at once to Centennial.

"Brigade commanders will report at Cedar Ridge at 10:00 AM for orders for the attack."

b. At 8:50 AM, General A directs General "Artillery Brigade:"

"Move the artillery, except that of the advance guard, by the most expeditious routes to positions east of the general line: crossroads 582-C—Cedar Ridge—hill 627, and cover the development and deployment of the division.

"Meet me at Cedar Ridge at 9:45 AM, to learn my plans for the attack and make your recommendations for the employment of the artillery."

c. At 8:52 AM, General A directs his chief of staff:

"I am going to reconnoiter the terrain and the hostile dispositions from Bonneauville, after which, moving by automobile by way of road junction 617-C, I shall continue my reconnaissance stopping first at road junction 606-A, and then going *via* Brush Run School and Kohler School to crossroads 582-C. I shall arrive at Cedar Ridge about 9:40 AM.

"G-3, my aide, and the stenographer will accompany me.

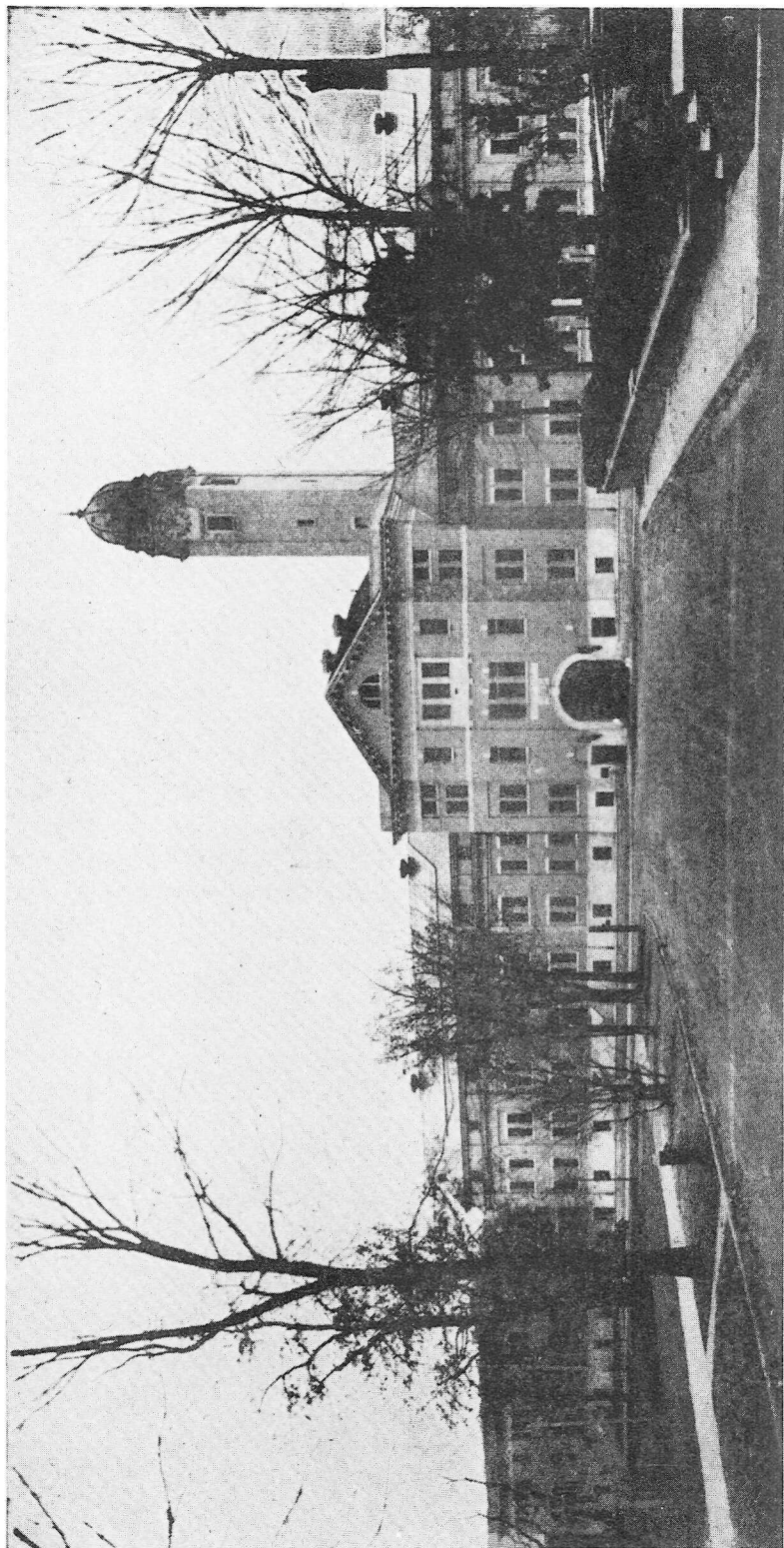
"Rejoin me at Cedar Ridge."

d. From 8:55 AM to 9:40 AM, General A is engaged in reconnoitering the terrain and the hostile dispositions from the localities above indicated.

5. SPECIAL SITUATION (BLUE), CONTINUED.—a. At 9:40 AM, General A and party reached Cedar Ridge and are re-joined by the chief of staff.

b. From 9:40 AM to 9:45 AM, General A studies the terrain as seen from the vicinity of Cedar Ridge, moving on foot with his party to (361.3-751.2).

c. At 9:45 AM, G-2, who has just completed an aerial reconnaissance of the hostile positions, and General "Artillery Brigade" join General A.



THE COMMAND AND GENERAL STAFF SCHOOL IN 1937





d. From 9:45 AM to 10:00 AM, General A, in conference with his chief of staff, G-3, and General "Artillery Brigade," discusses his plan of attack and receives the recommendations of General "Artillery Brigade" for the employment of the artillery.

e. By 10:00 AM, the infantry brigade commander and the division signal officer have joined General A's party at (361.3-751.2).

f. The situation as known to General A at 10:00 AM, from information from all sources is as follows:

(1) (a) Hostile infantry covering detachments, estimated strength two battalions, are on the line: crossroads 506-A—knoll four hundred yards south of Moritz School—woods at (359.2-752.4)—woods just southeast of road junction 597-B—woods at (356.6-751.3).

(b) Hostile infantry concentrations, estimated as a battalion in each locality, are reported as follows: woods at (359.8-754.5), woods just north of road junction, 600-B, woods northwest of road junction 597-B, and on Granite Hill (hill).

(c) Hostile light artillery, about a battalion in each locality, is in position about eight hundred yards west of E. Hoyle and northwest of Granite Hill (village). The remainder of the Red light artillery is halted northwest of Shelby and south of Wilcox.

(d) The rear infantry regiments of each Red column are assembling in the woods in the vicinity of Shelby and road junction 602-D.

(2) (a) The Blue advance guards, one battalion of each, deployed, are holding the line ordered by General A. The reserve of the east advance guard is twelve hundred yards northeast of Cedar Ridge and its artillery is in action in the vicinity of crossroads 593-B. The left advance guard is disposed as at 8:45 AM.

(b) The remainder of the 1st Division is executing the orders issued by General A at 8:45 AM and 8:50 AM for the development.

g. All the officers present with General A are familiar with the situations as set forth above.

6. SECOND REQUIREMENT.—Orders as actually issued by Major General A for the attack, omitting orders for the employment of the artillery.

### SECTION III

#### A Solution of Second Requirement

Orders for the attack ----- Paragraph 7

7. ORDERS FOR THE ATTACK.—At 10:05 AM, Major General A issued orally to the officers assembled at (361.3-751.2) his orders for the attack. These orders, omitting orders for the employment of the artillery, were as follows:

“You are familiar with the situation.

“The division attacks with brigades abreast at 1:30 PM, enveloping the hostile left.

“Boundary between brigades: crossroads 487 (364.1-750.1)—house at (361.9-752.1)—road junction 552-E, all to 1st Brigade—Hunterstown, to 2d Brigade.

“Line of departure: Swift Run—line now held by the advance guards.

“The 1st Brigade, less one battalion, with the 1st Tank Company, less one platoon, attached, will develop the hostile left and push its attack to the high ground just north of Hunterstown.

“The 2d Brigade, with one platoon, 1st Tank Company, attached, making its main effort on its right, will assist the advance of the 1st Brigade by capturing hill 637 and will push its attack to the ridge southwest of Hunterstown.

\* \* \* \* \*

“The 1st Squadron, 1st Cavalry, less one platoon, will cover the right of the 1st Brigade and will attack in flank any hostile force found northeast of the road: Brush Run—Hunterstown. One platoon will cover our left from the vicinity of Rocky Grove School.

“The air service will continue battle reconnaissance.

“The 1st Engineers will assemble south of Brush Run School and await orders.

“One battalion, 1st Brigade, in division reserve, will take station in vicinity of road junction 596-A.

“Elements of the advance guard of the 1st Brigade, in the zone of action of the 2d Brigade, will hold their present positions until passed by assault units.

“Administrative details will be ordered later.

“Axes of signal communication:

1st Division: Centennial—Cedar Ridge;

1st Brigade: Kohler School—crossroads 506-A;

2d Brigade: House two hundred yards northeast of road junction 604-B—road junction 580-B.

Command posts:

1st Division: Centennial;

1st Brigade: Kohler School;  
 2d Brigade: house two hundred yards northeast of road  
 junction 604-B.  
 "Written orders in confirmation of this order will be issued  
 about 12:00 noon.  
 "It is now 10:15 AM.  
 "Are there any questions?"

SITUATION

MP 29

THE COMMAND AND GENERAL STAFF SCHOOL

Fort Leavenworth, Kansas

1936-1937

Map Problem No. 29

10 February, 1937

	Paragraphs
SECTION I.—Situation and First Requirement .....	1-3
II.—Second Special Situation .....	4-6
III.—A Solution of Second Requirement .....	7
IV.—Discussion .....	8-11
V.—Comments on Solutions .....	12

SECTION I\*

Situation and First Requirement

	Paragraph
General situation .....	1
Special situation .....	2
First requirement .....	3

1. GENERAL SITUATION.—*a. Maps.*—Special Map A herewith. Special Map B will be issued with Section II.

*b. Boundary.*—The Potomac River forms part of the boundary between two states which are at war: Red, northeast and Blue, southwest.

*c. Main forces.*—Blue and Red main forces are engaged west of South Mountain.

2. SPECIAL SITUATION.—*a. Red.*—It has been learned that Red is concentrating a reinforced corps north of the Susquehanna River in the general area: Pequea Creek (village) (430-750)—Paradise (450-770)—Ephrata (430-790)—Cornwall (410-790)—Middletown (390-790)—Columbia

\*To be issued with Special Map A in map-problem rooms at 1:00 PM, 10 February.

(410-770) (see Special Map A). Red has strong forces furnishing local and antiaircraft protection to the bridges over the Susquehanna River from Havre de Grace (450-710) to Harrisburg (370-790), both inclusive, all of which are still intact. The Red cities of Washington and Baltimore are defended by locally mobilized fortress troops, not organized or equipped for offensive action. Red horse cavalry detachments are patrolling the area east of South Mountain.

b. *Blue*.—(1) Blue has concentrated the I Corps, reinforced, a part of the First Army (see paragraph 1, Table 11, page 20, *Reference Data*, C&GSS, 1936), Lieutenant General A commanding, south of the Potomac River in the general area: Elkins (330-630)—Knoxville (290-670)—Round Hill (290-650)—Middleburg (290-630)—Fairfax (330-610) with divisions disposed as shown on Special Map A. The 1st Cavalry Brigade, reinforced (see paragraphs 1 and 5, Table II, *Reference Data*, C&GSS, 1936), assisted by the 901st and 903d Cavalry Squadrons, reinforced (see paragraphs 1 and 6, Table 11, *Reference Data*, C&GSS, 1936) on its right and left respectively, was pushed across the Potomac River to cover the I Corps concentration. The cavalry units have advanced to the general line: Rockville (350-650)—Augusta (290-690) where they are confronted by small hostile cavalry detachments. Both infantry detachments following the cavalry across the Potomac River, are securing the crossings at the places shown on Special Map A. The only one of these crossings suitable for heavy motor vehicles is the bridge at Point of Rocks (310-670).

(2) Blue has air superiority. GHQ and First Army Aviation units are reconnoitering in the Cumberland Valley, west of South Mountain, and north of the Susquehanna River. I Corps Aviation is observing the area east of South Mountain between the Potomac and Susquehanna Rivers, inclusive.

(3) Lieutenant General A, who is at his headquarters at Leesburg (310-650), is familiar with all of the details above. At 5:30 PM, 9 February, he received the following message from the First Army:

"In preparation for an early advance by the First Army, you will cross the border with your command with-

out delay. Advancing in the area between CHESAPEAKE BAY and SOUTH MOUNTAIN, you will seize and secure the rail centers of HANOVER (370-730) and GETTYSBURG (350-759), including the direct rail line between these centers. Brigadier General M, commanding the 951st Cavalry Brigade (Mechanized), reinforced, will report to you at 10:30 PM, this date. His brigade will arrive at LEESBURG (310-650) tonight, at which time, and until further orders, it will be attached to your corps."

(4) Upon arrival at the I Corps Command Post, Brigadier General M informed the corps commander that the 951st Cavalry Brigade (Mechanized), reinforced, would arrive at Leesburg at such time as would enable it to be serviced, rested, and ready to move by 1:00 AM, 10 February.

*c. Situation up to 1:00 AM, 10 February.*—(1) In compliance with orders issued by Lieutenant General A:

(a) The divisions of the I Corps started crossing the Potomac River at 8:30 PM, 9 February, with the mission of advancing rapidly to the northeast for the purpose of seizing and securing Hanover and Gettysburg and the direct rail line between these towns.

(b) The 1st Cavalry Brigade, reinforced, screened the crossing of the 1st, 2d and 3d Divisions and prepared for a rapid advance to the northeast starting at daylight, 10 February.

(c) The cavalry squadrons attached to the divisions, prepared to relieve the 1st Cavalry Brigade along the general line: Rockville—Clarkburg—Jefferson—Augusta by daylight, 10 February.

(2) The leading elements of the divisions are expected to reach, by daylight 12 February, the high ground through the general line: Shrewsbury (390-730)—Farmer (370-750)—Heidlersburg (350-750). This is the line which Lieutenant General A has decided he must hold in order to accomplish his mission of securing Hanover and Gettysburg and the direct rail line between these towns.

(3) The following message was received from the First Army at 10:00 PM, 9 February:

"Air reconnaissance has been unable to locate any large bodies of Red troops north of the SUSQUEHANNA

RIVER other than the Red corps concentration already known to you and no movement across that river have been detected up to dark, 9 February. Information has been furnished by our agents that Reds will start crossing in force at COLUMBIA (410-770) and SHOCKS MILLS (390-770) early the morning of 11 February."

(4) The 101st Observation Group is intact and all squadrons are operating directly under I Corps control from the corps airdrome near The Plains (290-630). No attachments will be made to divisions until contact with Red forces is imminent. The 901st Observation Squadron (separate) is attached to and will operate under direct control of the 1st Cavalry Brigade from the I Corps airdrome.

(5) The 951st Cavalry Brigade (Mechanized), reinforced, is at Leesburg serviced, rested and ready to move.

*d. Weather, roads and streams.*—The weather is clear and cold and has been so for some time. The forecast is that there will be no change. All roads are dry. The Susquehanna and Potomac Rivers are unfordable for all vehicles. All streams overprinted on the map with heavy blue lines are also known to be unfordable for all vehicles throughout the distances shown by the overprint.

3. FIRST REQUIREMENT.—So much of the plan of Lieutenant General A as of 1:00 AM, 10 February, for the projected operations of the 951st Cavalry Brigade (Mechanized), reinforced, as pertains to the following only:

*a.* Mission(s) to be assigned with brief reasons therefor.

*b.* Measures to be taken to provide proper air observation.

## NOTES

1. Solutions of the First Requirement will be turned in by 3:00 PM, 10 February, at which time Section II of this map problem will be issued.

2. Special Map A will be retained for use with Section II.

## SITUATION

MP 29

## THE COMMAND AND GENERAL STAFF SCHOOL

Fort Leavenworth, Kansas

1936-1937

## Map Problem No. 29

10 February, 1937

## SECTION II\*

## Second Special Situation

	Paragraph
A solution of first requirement .....	4
Special situation, continued .....	5
Second requirement .....	6

4. A SOLUTION OF FIRST REQUIREMENT.—So much of the plan of Lieutenant General A as of 1:00 AM, 10 February, for the projected operations of the 951st Cavalry Brigade (Mechanized), reinforced, as pertains to the following only:

*a. Mission to be assigned, with brief reasons therefor.*  
—(1) Lieutenant General A planned to have the 951st Cavalry Brigade (Mechanized), reinforced, moving under cover of darkness to the line held by the 1st Cavalry Brigade, cross this line in the vicinity of Clarksburg (330-670) (Special Map A) at daylight (6:15 AM), 10 February, and advancing rapidly to the northeast, hold the Red corps beyond the general line: Shrewsbury—Farmer—Heidlersburg until noon, 12 February.

(2) The 951st Cavalry Brigade (Mechanized) was evidently attached to the I Corps for a specific purpose. The mission of the corps, the capabilities of the enemy, and the capabilities of the organic elements of the corps and of the mechanized brigade are the determining factors in deciding on a mission for this brigade. From a consideration of these factors, Lieutenant General A decided to employ

---

\*To be issued with Special Map B in map-problem rooms at 3:00 PM, 10 February. Special Map A will be retained by class for use with this Section.

the 951st Cavalry Brigade (Mechanized) on the mission stated in (1) above because:

(a) This mission is vital to the accomplishment of the I Corps' mission.

(b) He has no other element available which is as capable of accomplishing this mission.

(c) The mission is well suited to the capabilities of the mechanized brigade.

(d) The mission is of such importance to the I Corps and the First Army as to justify probable losses.

*b. Measures to be taken to provide proper air observation.*—Lieutenant General A planned:

(1) To attach on observation squadron (the 104th) from the 101st Observation Group to the 951st Cavalry Brigade (Mechanized), effective at 1:00 AM, 10 February.

(2) To direct all observation aviation operating directly under the I Corps and the 1st Cavalry Brigade to report direct to the 951st Cavalry Brigade (Mechanized) any Red cavalry, motorized, or mechanized units discovered.

(3) To request that observation aviation of GHQ and the First Army report any Red motorized or mechanized units discovered approaching the area east of South Mountain and south of the Susquehanna River.

5. SPECIAL SITUATION, CONTINUED.—*a. 951st Cavalry Brigade (Mechanized), reinforced.*—(1) The 951st Cavalry Brigade (Mechanized), advancing in combat formation, passed through the 1st Cavalry Brigade at daylight, 10 February, along a front of about four miles just to the west of Clarksburg (330-670) (Special Map A) and, overcoming the resistance offered by Red horse cavalry detachments and a few Red armored cars, moved forward and assembled on the open ground in the vicinity of Kemptown (350-670) (Special Map A). Here the brigade was reformed and at 7:30 AM, started its advance in two columns to the northeast on roads between Parrs Ridge and the Monocacy River, preceded by thirty minutes by the two armored-car troops. The advance guards were able to overcome such further resistance as was offered by small Red horse cavalry detachments and armored cars, and the advance continued in the following order:



*Left Column*

Advance Guard:

Tr B 952d Cav (Mecz) (less 1st Plat)  
1st Plat MG Tr 952 Cav (Mecz)  
1st Sec Mortar Plat 952d Cav (Mecz)  
1st Plat 951st Engrs (Tr, Mecz).

Main Body:

Fwd Ech Regtl Hq 952d Cav (Mecz)  
MG Tr 952d Cav (Mecz) (less 1st Plat)  
Mortar Plat 952d Cav (Mecz) (less 1st Sec)  
Btry A 951st FA Bn (Mecz)  
2d C Car Sq 952d Cav (Mecz)  
1st C Car Sq 952d Cav (Mecz) (less dets)  
Rr Ech Hq Tr 952d Cav (Mecz)  
Med dets  
Maint Plat, Serv Tr 952d Cav (Mecz)  
\* \* \*

*Right Column*

Advance Guard:

Tr B 951st Cav (Mecz) (less 1st Plat)  
1st Plat MG Tr 951st Cav (Mecz)  
1st Sec Mortar Plat 951st Cav (Mecz)  
951st Engrs (Tr, Mecz) (less dets).

In interval between advance guard and main body:  
Brig Gen M and party.

Main Body:

Fwd Ech Brig Hq 951st Cav Brig (Mecz)  
Fwd Ech Regtl Hq 951st Cav (Mecz)  
MG Tr 951st Cav (Mecz) (less 1st Plat)  
Mortar Plat 951st Cav (Mecz) (less 1st Sec)  
951st FA Bn (Mecz) (less Btry A)  
2d C Car Sq 951st Cav (Mecz)  
1st C Car Sq 951st Cav (Mecz) (less dets)  
Rr Ech Hq Tr 951st Cav (Mecz)  
Med dets  
Maint Plat, Serv Tr 951st Cav (Mecz)  
\* \* \*

(2) Troop A 951st Cavalry (Mechanized) and Troop A 952d Cavalry (Mechanized), both with engineer reconnaissance personnel attached, were able to move out as soon as the brigade passed through the Red resistance on its front, and, by 7:00 AM, were advancing by bounds and reconnoitering the zone of advance of the brigade. Occasionally they reported sighting Red armored cars and small cavalry detachments. About 8:00 AM, as these troops were approaching the line of the Western Maryland Railroad through Glen Falls Sta (380-705)—Westminster (370-715)—New Windsor (360-710)—Union Bridge (355-715)—Middleburg (350-720), reports were received that road blocks and resistance were being encountered along the crossings of North Branch Patapsco River, West Branch and Little Pipe Creek. The troops were directed to intensify and push their reconnaissance and by 8:30 AM the follow-

ing had been reported: (All information reported is shown by symbols on Special Map B.)

(a) All entrances to Westminster seemed to be blocked.

(b) Defended road blocks were encountered at Finksburg Sta (380-705), Patapsco (380-710), Tannery (375-715), Shrivvers Mill (365-715), Wakefield (360-715), and about one mile south of Middlesburg (350-720).

(c) Machine-gun fire was received from Red detachments in the vicinity of New Windsor (360-710) and Union Bridge (355-715).

(d) Bridges have been destroyed at Lawndale (380-710), Carrolton (375-715), Wagners Mill (365-715), Linwood (355-715) and about one mile to the west thereof, and at the crossing about one-half mile north of Bethel Church (350-715) but armored cars were able to ford the streams in the vicinity of these damaged bridges, none of which seemed to be covered by enemy fire.

*b. Air service.*—(1) One plane of the 104th Observation Squadron was being kept in the air observing for the 951st Cavalry Brigade (Mechanized). The other planes of the squadron were at the I Corps airdrome near The Plains (Special Map A) where they were available on call.

(2) From reports received from the air service of the brigade, corps and higher headquarters, S-2 of the 951st Cavalry Brigade (Mechanized) compiled the following enemy information:

(a) Small Red mechanized detachments were observed leaving Westminster shortly after daylight and moving to the east and west of that city to points generally along the line of the Western Maryland Railroad where they appear to have halted. The location of the detachments reported by the air service were found to agree with the road blocks and machine-gun installations reported by Blue armored-car reconnaissance units (see Special Map B).

(b) At 8:30 AM, a Red mechanized force, which was first discovered as it started to move out of Westminster at about 8:00 AM was in the general area: Wakefield (360-715)—Walls Mill (355-715)—New Windsor (360-710) with a battery of truck-drawn artillery in position in the woods one mile northeast of New Windsor. This force was estimated to be the main part of a reinforced mechanized cav-

alry regiment. The remainder of this regiment consists of the detachments already reported as having moved out into positions to the east and west of Westminster.

(c) No Red forces other than the corps north of the Susquehanna River, the mechanized cavalry regiment in contact with the 951st Cavalry Brigade (Mechanized) and a few scattered armored cars and horse cavalry detachments, have been discovered up to 8:30 AM by the air observers within or approaching the I Corps zone of advance.

*c. 1st Cavalry Brigade.*—The 1st Cavalry Brigade, having been relieved along its front by the cavalry squadrons of the divisions, started a general advance at daylight. It was able to overcome without difficulty any resistance offered by Red horse cavalry detachments and was advancing in two columns in the area between Parrs Ridge and the Monocacy River (Special Map A).

*d. Remainder of the I Corps.*—The crossing of the divisions and corps troops was proceeding without interruption and unless more serious Red opposition than was contemplated is encountered, the indications are that the advance elements of the divisions will reach the general line: Shrewsbury—Farmer—Heidlersburg (Special Map A) by daylight, 12 February as planned.

*e. Situation at 8:30 AM, 10 February.*—(1) *Blue.*—

(a) The main bodies of the two columns of the 951st Cavalry Brigade (Mechanized) have just halted with the heads of the columns at Sams Creek (village) (360-705) and crossroads 574 (350-705). The advance guard of the right column has been stopped by machine-gun fire from the vicinity of Tollgate (360-710). The advance guard of the left column is not encountering hostile resistance. The armored-car troops, operating under regimental control, are reconnoitering to the front and flanks. The 104th Observation Squadron has been notified that additional planes probably will be needed soon.

(b) Brigadier General M, his S-2 and S-3, regimental commanders, commanders of separate units and the air liaison officer, all of whom are familiar with the situation, are at road junction 513 (360-710).

(c) The advance guards of the 1st Cavalry Brigade are approaching Ridgeville (355-690) and Plane No. 4 (350-690).

(2) *Red.*—The enemy situation is as shown on Special Map B and as given above.

*f. Weather, roads and streams.*—No change.

6. SECOND REQUIREMENT.—Orders as actually issued by Brigadier General M at 8:30 AM, 10 February, exclusive of administrative details.

#### NOTE

Solutions of the Second Requirement will be turned in by 5:00 PM, 10 February.

SOLUTION

MP 29

### THE COMMAND AND GENERAL STAFF SCHOOL

Fort Leavenworth, Kansas  
1936-1937

Map Problem No. 29

10 February, 1937

#### SECTION III

#### A Solution of Second Requirement

Paragraph

A solution of the second requirement ----- 7

7. A SOLUTION OF THE SECOND REQUIREMENT.—At 8:30 AM, 10 February, at road junction 513 (360-710), Brigadier General M, after directing the air liaison officer to have two additional planes report at once, issued orally to his assembled party the following orders:

“You know the situation.

“Brigade attacks at once enveloping the hostile right and left flank with a view to destroying the Red force now opposing our advance.

“Initial objective: enemy main force.

“951st Cavalry [less 1st Squadron (less detachments in advance guard)], with 2d Platoon 951st Engineers and Bat-

tery B 951st Field Artillery Battalion, attached, engage the enemy in front of New Windsor with a portion of its force and, moving by defiladed routes to the vicinity of Wagners Mill (365-715) with the remainder of its force, attack the left flank and rear of the Red main force and prevent any withdrawal of this force to the east of Little Pipe Creek.

"952d Cavalry, with 1st Platoon 951st Engineers and Battery A 951st Field Artillery Battalion, attached, moving to the vicinity of Linwood (355-715), attack the right flank and rear of the Red main force.

"951st Field Artillery Battalion (less detachments), from positions in the general vicinity of road junction 629 (about one mile northeast of here), neutralize the enemy battery and machine guns in the vicinity of New Windsor. Be prepared for prompt movement with the brigade reserve on my order.

"104th Observation Squadron execute route and battle reconnaissance for 951st Cavalry, reporting direct to that regiment. Same for 952d Cavalry. Report progress of my two regiments and any enemy movements to me. Maintain lookout for any enemy forces approaching the vicinity and report same to me.

"1st Squadron 951st Cavalry (less detachments), brigade reserve, move to vicinity of Englars Mill (355-710) and be prepared for prompt movement to reinforce the action of the 951st and 952d Cavalry on my order.

"Limit of pursuit: Meadow Branch—Big Pipe Creek.

\* \* \* \* \*

"Messages to me on hill  $1\frac{1}{4}$  miles north of Mt. Zion Church (355-710).

"Any questions?

"Move out.

"S-3, notify those of the brigade concerned not present, also 1st Cavalry Brigade and I Corps.

## SECTION IV

## Discussion

	Paragraphs
Purpose -----	8
Plan of corps commander -----	9
Decision of Brigadier General M -----	10
Orders as issued -----	11

8. PURPOSE.—The purpose of this problem is to illustrate:

*a.* The employment of the rapidity of movement and great fire power of a mechanized cavalry brigade by the commander of a reinforced corps for a rapid advance ahead of the corps to gain early contact with and to delay a hostile force of all arms and to hold their force beyond an important terrain objective pending the arrival of the main body of the corps.

*b.* The proper decision and technique of operation by the commander of a mechanized cavalry brigade when, incident to carrying out its mission of advancing to contact and delay a large hostile force of all arms, his brigade is confronted by an inferior hostile mechanized cavalry force in a position which has some defensive strength.

9. PLAN OF CORPS COMMANDER.—*a. Employment of the 951st Cavalry Brigade (Mechanized).*—(1) Mechanized cavalry is not an organic part of a corps (see Table 2, *Reference Data*, C&GSS, 1936), nor is it a normal addition to a reinforced corps (see paragraph 1, Table 11, *Reference Data*, C&GSS, 1936). It is organized as GHQ or army units but may be attached to subordinate units such as corps or divisions for special missions. To justify such attachment, the subordinate unit should have an important mission, directly connected with the decisive effort of the whole force and on which the mechanized cavalry can be employed. (See paragraph 72, Part B, *The Tactical Employment of Cavalry*, C&GSS, 1936.)

(2) The I Corps has been given the mission of advancing to secure Hanover and Gettysburg and the direct rail line between these two towns as a preliminary step to an advance by the First Army. In view of the mission as-

signed, the First Army Commander evidently considers that two rail centers and the rail line between them are important to the success of his operation. He also realizes that the Red force just north of the Susquehanna River is in a favorable position to prevent the securing of these rail facilities if prompt action is not taken to delay it until such time as the Blue I Corps can get the bulk of its force on a favorable position sufficiently far to the north of the line: Hanover—New Oxford—Gettysburg to prevent Reds placing artillery fire on the railroad. The necessary attachments are accordingly made to enable the I Corps to perform its assigned mission. The First Army Commander could have directed the I Corps Commander to send the 951st Cavalry Brigade (Mechanized) forward to accomplish the mission for which this brigade evidently was attached. This would have been an unwarranted interference with Lieutenant General A who should be allowed to assign proper missions to and to conduct the operations of the elements of his command, once the mission of his force has been given him.

(3) Lieutenant General A is commanding a force that is composed of all arms and services and he should give careful consideration to the employment of each unit to insure that it is used on missions that are in keeping with its capabilities and that contribute to the successful accomplishment of the mission of his command as a whole. The temporary attachment of a mechanized cavalry brigade calls for special consideration on his part to insure that the characteristics and the capabilities of his force are used to the best advantage and also, to insure that it is used in accordance with the purpose for which it was attached; particularly that it is not used on a mission that can be accomplished by some other unit of the corps. The great strategic and tactical mobility and concentrated fire power of this mechanized force make it capable of performing a number of missions in this situation such as (a) destruction of the bridges over the Susquehanna River or the important railways into Baltimore and Washington, (b) reconnaissance of the area east of South Mountain, (c) raids on important Red cities, as well as, (d) contact with and delay of any hostile forces which directly threaten the I Corps mission of securing rail facilities for the supply of the First Army. These

should all be given consideration before a plan for the use of the mechanized brigade is finally decided upon. Any missions which necessitate a separation of the components of the mechanized force or which are liable to involve serious losses without assisting materially in the accomplishment of the I Corps' mission should be discarded as being unjustified in this situation. Separation of parts of the force beyond supporting distance when operating in enemy territory where encounters with Red mechanized forces are always probable makes defeat in detail possible. The difficulty of replacement of mechanized forces justifies large losses only when the mission is of such importance as to contribute materially to the decisive effort of the main body involved in the operation. The destruction of the bridges over the Susquehanna River, particularly those at Columbia and Shocks Mills, would undoubtedly assist in delaying any advance of Reds across the river. However, these bridges are well protected and the probability of being able to get to them and destroy them without serious losses is small. Destruction of the railroads leading into Baltimore and Washington might prevent Reds from concentrating troops in these cities and threatening the flank of the I Corps as it advances, but to be effective, the damaged railroads would have to be kept under fire to prevent repair. Reconnaissance of a considerable portion of the area east of South Mountain could be accomplished by the mechanized brigade but air corps units can better execute such distance reconnaissance as is necessary and horse cavalry of the divisions is better suited to conduct the close-in reconnaissance. Furthermore, none of the missions considered so far is directly connected with, or materially contributes to, the accomplishment of the I Corps mission. The main Red threat to the successful accomplishment of the I Corps' mission, and ostensibly, to the First Army's mission is the force concentrated just north of the Susquehanna River. An advance of approximately thirty miles by the bulk of these Reds will make the accomplishment of the I Corps' mission extremely difficult, if not impossible, without strong reinforcements and a direct attack. The I Corps has to advance over sixty miles (more than twice the distance to be covered by the Red corps), before it can accomplish its mission.



(4) From a consideration of the capabilities of the different elements of his force and of the delay which must be inflicted on the threatening Red force, it should be evident to Lieutenant General A that the 951st Cavalry Brigade (Mechanized) is the force available that is capable of making the necessary rapid advance toward York and intercepting the enemy prior to the time that Red can move some of his force to the southeast and gain the high ground through the general line: Shrewsbury—Farmer—Heidlersburg. Since (a) there is no other force available which is as capable of accomplishing the mission, (b) the mission is well suited to its capabilities, and (c) the mission is one of such importance to the decisive effort of the I Corps as to justify sacrifices, Lieutenant General A plans to send out the 951st Cavalry Brigade (Mechanized) to hold the Red forces beyond the vital terrain feature until such time as will insure the success of the I Corps' and the First Army's mission.

(5) In assigning the mission to Brigadier General M, the corps commander should follow the same policy followed by the army commander, and not attempt to limit the mechanized brigade commander by numerous instructions and restrictions. In this situation, it is necessary to control the brigade's movements only during the time that it is within the area occupied by other troops of the corps. The capabilities of a mechanized force for cross-country movement at night are so limited that when road blocks and enemy interference are expected, such a force should ordinarily not be moved beyond the area protected by friendly troops until after daylight. Consequently, the corps commander planned to have the 951st Cavalry Brigade (Mechanized) move to the line held by the 1st Cavalry Brigade during darkness and to start its advance from this line at daylight. He designates the approximate area where the mechanized brigade is to be at daylight in order that its move during the night may be coordinated and that it may have a favorable place from which to start its advance. Thereafter, all that is necessary is to assign a direction of advance and a line and time beyond which the Red forces are to be held, leaving the details of execution up to Brigadier General M. The line beyond which and the time during which the enemy must be held should be such as will allow the mechanized

brigade commander the maximum space for delay and require the minimum passive defensive action consistent with the accomplishment of the mission of the whole force. This allows the mechanized force commander to make the maximum use of the force's mobility and concentrated combat power for delaying and involves the force for the minimum time in decisive defensive action where greater losses are liable to occur and less use can be made of mobility. Since the 1st Cavalry Brigade will be following the mechanized force and the two brigades will be in position in about ten hours to cooperate in delaying and, probably, defensive action, the corps commander plans to have them do this. It will enable advantage to be taken of the characteristics of these two forces which make them ideally suited for conducting such actions when operating together, particularly against a force of all arms that may have mechanized cavalry (see paragraph 107, Part B, *The Tactical Employment of Cavalry*, C&GSS, 1936). When Lieutenant General A actually issues the order assigning missions to the 1st Cavalry Brigade and the 951st Cavalry Brigade (Mechanized) it will be necessary for him to specify who will be in command when the two brigades come within cooperating distance. Reference to the 1st Cavalry Brigade was omitted in the solution however because only so much of the plan of the corps commander as pertained to the 951st Cavalry Brigade (Mechanized) was called for.

*b. Air observation for the 951st Cavalry Brigade (Mechanized).—*(1) The rapidity of movement and long radius of operation of a mechanized force are such that close cooperation of air service, especially in enemy territory, is essential to the successful conduct of the force's mission. Although not organically a part of a mechanized cavalry brigade, air service is of such great assistance in executing reconnaissance for the advance and for flank security, for use in maintaining control of the columns and reconnaissance groups, and for executing battle missions, that it should be considered an essential part of the mechanized combat team. It is therefore the duty of the higher commander under whom the mechanized force is operating to provide adequate air service for any mission assigned. He

should also arrange for its close cooperation with or direct control by the commander of the mechanized force.

(2) In this situation, the I Corps Commander has under his control the 101st Observation Group (consisting of the 101st, 102d, 103d, and 104th Observation Squadrons) and the 901st Observation Squadron (separate). The 901st Observation Squadron (separate) normally is attached to and operates with the 1st Cavalry Brigade and since this brigade is to perform its usual function of preceding the divisions in the advance, there is no reason for making any change in its air service attachment. Because of the distance of the enemy main forces, the improbability of strong attacks from either flank, and the fact that both the 951st Cavalry Brigade (Mechanized) and the 1st Cavalry Brigade will precede the corps, there is no necessity in this situation far attaching air service to the divisions until contact with Reds becomes imminent. Therefore, Lieutenant General A has the four squadrons of the organic corps observation group available for observing for the corps and for such use as he deems necessary with the 951st Cavalry Brigade (Mechanized). The 101st, 102d, and 103d Observation Squadrons are normally attached to the 1st, 2d, and 3d Divisions, respectively, whenever attachments are considered necessary. Since one observation squadron of ten active planes is sufficient to furnish one plane on continuous flying duty and at least two planes on alert at the airdrome during the period that the mechanized cavalry brigade is liable to be operating independently, a plan to attach one observation squadron (the 104th) initially to the 951st Cavalry Brigade (Mechanized) is considered sound. A smaller observation unit would be insufficient to furnish the necessary missions. The attachment of more than one squadron is not justified in this situation, as the proximity and availability of the remainder of the 101st Observation Group make additional planes readily available if unexpected circumstances demand such. Attachment of an air service unit to the mechanized brigade rather than a plan to have air service cooperate with this brigade is considered preferable in this situation. Ample air service units are available and attachment gives the brigade commander somewhat better control over this important element.

(3) Observation missions, other than those sent out by the 951st Cavalry Brigade (Mechanized), are operating over areas from which they may obtain information of importance to the mechanized brigade. In the area east of South Mountain and south of the Susquehanna River, any cavalry, mechanized, or motorized force appearing is a possible threat to the Blue mechanized brigade. Mechanized or motorized forces approaching the area east of South Mountain from north of the Susquehanna River or from the Cumberland Valley are also possible threats to the 951st Cavalry (Mechanized). The I Corps Commander accordingly plans to direct all observation aviation operating directly under I Corps control and under the direct control of the 1st Cavalry Brigade to report direct to the mechanized brigade any forces discovered which might threaten that brigade. Observation planes of GHQ and the First Army also are operating over areas from which Red forces may approach to interfere with the 951st Cavalry Brigade (Mechanized). Lieutenant General A accordingly plans to request the higher headquarters to report any higher mobile Red forces discovered approaching the area east of South Mountain.

10. DECISION OF BRIGADIER GENERAL M.—*a. Mission.*—The 951st Cavalry Brigade (Mechanized) is engaged on a mission which requires a rapid march to intercept and delay hostile forces which are expected to cross the Susquehanna River some fifty miles distant. It is preceding a large force of all arms. This is a typical mission for mechanized cavalry and one for which it is particularly well suited. (See paragraph 105, Part B, *The Tactical Employment of Cavalry*, C&GSS, 1936.) While the importance of time to the accomplishment of his mission and the avoidance of any unnecessary delays may lead Brigadier General M to consider an attempt to contain or pass around the Red force in his front, he must not lose sight of the fact that although his direct mission is to advance rapidly to the northeast and hold Red forces beyond a certain line for a definite time, the successful accomplishment of the mission of the I corps depends largely on the uninterrupted advance of its three divisions.

*b. Situation.*—(1) *Red.*—Brigadier General M, whose force has already been delayed somewhat by having to combat Red horse cavalry detachments before being able to get

into a suitable march formation, now finds his progress blocked by a Red mechanized force of approximately half his size. This force, moving under cover of darkness in friendly territory, has advanced to the vicinity of Westminster where it has taken advantage of the favorable road net, the corridor formed by the unfordable Patapsco and Monocacy Rivers, and the obstacle of the streams flowing generally east and west from Westminster, to remain in readiness to block the Blue advance. In the meantime, the Red force has been utilizing the time since daylight to increase somewhat the natural defensive strength of its position by demolitions and rock blocks. The action of the main body of the enemy forces in remaining in Westminster until the 951st Cavalry Brigade (Mechanized) had committed itself to a definite route and then moving out taking up a position in front of the Blue force, indicates that Red intends either to fight a delaying action or to make a decisive stand. Red has yet done nothing however which will limit his maneuverability or restrict his freedom of action.

(2) *Blue*.—The 951st Cavalry Brigade (Mechanized) preceded by armored-car patrols is marching in two columns, each composed of a complete combat team capable of rapid development and independent action or mutual support. The 1st Cavalry Brigade is following closely enough behind the mechanized brigade to merit consideration in any action contemplated by Brigadier General M. The armored cars and air service have been able to furnish considerable information. None of the intelligence agencies, however, has been able to secure sufficient information upon which a definite conclusion can be based as to whether Red will remain and fight, will attempt to slip past, or will delay and retire.

*c. Terrain*.—Red has taken up a position between two unfordable rivers, the Patapsco and Monocacy, and behind several small streams generally paralleled by a railroad line. In this situation as it is at 8:30 AM, 10 February, the Patapsco River is too distant to have much influence except to provide flank protection for an avenue of withdrawal into the Baltimore area should the Red force find itself closely pressed from the west without being cut off from a withdrawal to the east. The proximity of the Monocacy River, while limiting any extensive maneuver to the west, neverthe-

less offers some advantage to Red should he decide to withdraw northward. The streams and railroad line in the Red main force's immediate front are somewhat of an obstacle but not such as to prevent mechanized maneuver as shown by the report that armored cars (wheel vehicles) were able to cross them. The terrain in the area north of the line occupied by Red's front (see Special Map B) is generally open and suitable for mechanized cavalry action as far as the line: Meadow Branch—Big Pipe Creek. A study of the map indicates that the marshes along the upper reaches of Meadow Branch and the size of the streams below the marshes may be such as to offer quite an obstacle to a mechanized force. Since no report on these streams is available to Brigadier General M at 8:30 AM, he should give them special consideration when issuing his order. The area south of the railroad contains the dominant observation. This would be a decided advantage to Blue if two forces of less mobility were involved. As it is, the defiladed routes leading toward Shrivvers Mill and Linwood and the excellent road net available south of the railroad are of more advantage to the Blue mechanized brigade. The rapidity of movement of the forces involved makes secrecy and favorable operating terrain of more importance to the Blue force than dominant observation. New Windsor, which is occupied at least by Red machine-gunners, is an obstacle which should be avoided by an attacking mechanized force. The Red main force evidently is taking advantage of this since it has concentrated in an area generally behind the town.

*d. Time.*—Time is important to Blue in this situation, both because the mission of the mechanized brigade demands that it contact the Red corps as soon as possible and because any delay in the immediate situation allows the main body of the Red mechanized force, which has just arrived in rear of New Windsor, more time to dispose of its units, gain information of the Blue force and prepare for defense. Because of this, Brigadier General M should act at once.

*e. Action decided upon.*—Brigadier General M realizes that the capabilities of his opponent and the terrain are not such that Red can be successfully bottled up or contained. An opportunity seems to be offered however to destroy the Red mechanized force and thus free himself and the I Corps

of this interference if prompt, aggressive action is taken. He realizes that the 951st Cavalry Brigade (Mechanized) to pass up this opportunity to attack and probably destroy this inferior Red mechanized force, would result in a continual harassment of the elements of the I Corps by this enemy force and the necessity of its eventual attack by some other Blue element not nearly so well suited for this purpose. [See paragraph 90 a (1) (b), Part B, *The Tactical Employment of Cavalry*, C&GSS, 1936.] He decides therefore that an attack for the purpose of destroying the enemy force is the line of action open to him that offers the best opportunity for carrying out his mission and for assisting the I Corps.

f. *Scheme of maneuver.*—Brigadier General M has been marching his brigade disposed in combat teams for the purpose of getting into action with the minimum loss of time. Now is his opportunity and he should engage his force with the least change in formation consistent with a logical scheme of maneuver. The defiladed routes to the vicinity of both Red flanks offer an opportunity to move forces to these places with the least interference by hostile artillery or combat vehicles and with a fair chance of secrecy. If this is to be a decisive encounter, every opportunity should be taken to hold Red in position. In this situation, it is possible for Red, if not interfered with, to withdraw readily to the eastward into the defended Baltimore area, or to the northward. There is little likelihood of being able to stop an early withdrawal to the north, but interference with a withdrawal to the east can and should be provided. One of the Blue combat teams is in a favorable position to accomplish this. Care must be exercised, however, that the components of the mechanized brigade are not unnecessarily split up and widely separated as this may afford Red a chance to destroy some of the smaller units. The left Blue column is in a favorable position to continue on and attack Red, making the principal effort of the brigade. Brigadier General M, therefore, decides to make a double envelopment of the Red main force using his two combat teams, as now marching, with the least change possible. Such a maneuver, if successful, offers the best opportunity for decisive action and the destruction of the Red force. It provides for the maximum use of maneuver by both regiments and involves little necessity for direct

action against a prepared position. While the solution presented favors a principal effort from the west because of the favorable location of the 952d Cavalry (Mechanized), a solution which provides for a principal effort from the east without undue rearrangement of the combat teams as marching is regarded as having considerable merit. An attack from the west with no provision made for interfering with a withdrawal to the east is not favorably considered in this situation since such an attack fails to take advantage of the possibility of holding Red in position for decisive action. It does however leave the brigade in a compact formation facilitating future rapid action should Red withdraw before becoming engaged.

11. ORDERS AS ISSUED.—*a. Form.*—Having decided to attack at once, Brigadier General M should issue the necessary orders to initiate and control the action of his force. Because of the time element, these orders should be issued orally and in the most concise form possible to the officers who are present with him.

*b. Basic decision.*—The second sentence of the order as issued is analogous to paragraph 2 of the formal written field order. It contains the complete basic decision of the commander upon which the details of the order are based. In that sentence the commander informed his subordinates what, where, when and how the brigade was to act and the purpose of the engagement.

*c. Initial objective.*—The purpose of the attack is to destroy the inferior Red mechanized force. Every effort should therefore be directed to that end. Consequently, the Red main force and not a terrain feature was assigned as the initial objective.

*d. Units involved.*—(1) *951st Cavalry (Mechanized).*—In order to execute the double envelopment, which is so desirable in this situation, a force equal to or greater than any the enemy can bring against it should be used on each flank unless provisions are made to support closely a weaker force. The advance guard of the 951st Cavalry is already engaged with the enemy. So far, it is the only Blue unit engaged. The 1st Squadron 951st Cavalry, from which most of the advance guard of the right column is composed, is marching near the rear of that column. Consequently, de-



taching this squadron (less detachments) will not interfere with the fight now being conducted by the advance guard. This will disrupt the regimental combat team least, will provide a unit readily available for a brigade reserve, will provide a reserve which is an organic part of the force which it is most likely to have to assist initially, and will provide a unit of which the Blue force now engaged is an organic part, should it become necessary to reinforce the advance guard. The 951st Cavalry [less the 1st Squadron (less detachments)], reinforced, will be somewhat weaker than the largest Red force which can be brought against it. The ready availability of the brigade reserve provides a reinforcement for this force, however, in the initial phase of the attack. Once the 952d Cavalry has gotten into the fight, there seems little probability that the 951st Cavalry will need assistance. It would be disastrous for Red to expose his rear to attack by the 952d Cavalry, which he would have to do in order to bring a superior force against the 951st Cavalry. Since a portion of the 951st Cavalry is already engaged in front of New Windsor, the control of this action is left up to the regiment. This enables the 951st Cavalry to control the action on its left flank and to maneuver this portion of its force as necessary. The possibility that Red may attempt to escape into Baltimore, if closely pressed and cut off from the north by the attack of the 952d Cavalry, makes it desirable that the 951st Cavalry be given definite instructions to cover this contingency. This avoids delay and possible non-delivery of orders should this contingency arise. Brigadier General M considers that holding the enemy, should he attempt to move to the east, is a mission of such importance that it must be provided for in order to permit the 952d Cavalry to complete the destruction of the enemy.

(2) *952d Cavalry (Mechanized).*—The 952d Cavalry, reinforced, is given the mission of advancing and attacking the right flank and rear of the enemy. This regiment is favorably disposed for making the principal effort of the brigade. It should be able to advance rapidly and with little interference until it comes into contact with the Red main force. Should Red turn to meet the 952d Cavalry, he will afford the 951st Cavalry an excellent opportunity to get into

the fight and to secure a position from which to cut off any possible enemy withdrawal. Should Red elect to remain in position or to attack the 951st Cavalry, an opportunity will be afforded the 952d Cavalry to attack Red from the rear. Brigadier General M directed "Colonel 951st Cavalry" to follow defiladed routes as he wished to assure as much speed of movement and secrecy as possible. While he is equally desirous of speed of movement and secrecy for the 952d Cavalry, he did not consider it necessary to specify that this regiment move by a defiladed route because the routes most available to the column are all fairly well defiladed.

(3) *951st Field Artillery Battalion (Mechanized).*—Artillery attached to mechanized cavalry attacking a hostile mechanized force cannot be used in the same manner as when attacking a non-mechanized force. It must follow closely behind the mechanized cavalry and, when the latter encounters resistance which it cannot overcome by itself, the artillery must be prepared to go into action rapidly, well forward, from where it can reduce the resistance by direct laying. Brigadier General M made the least possible change in the artillery of the two combat teams. One battery was left with each combat team and the remainder of the battalion (one battery) kept under brigade control and given a mission initially of neutralizing the enemy fire that is liable to interfere with the movements of the two regiments. This provides each combat team with artillery for close support and frees the enveloping forces from the necessity of putting their artillery into action to prevent Red artillery from interfering with their advance. It should also help to increase the secrecy of the movement of the two regiments, since the battery under brigade control is centrally located and equally interested in keeping down fire on the right and left. The attack of the advance guard of the right column supported by the fire of a battery of field artillery may also tend to give Red the impression that the force in front of New Windsor is much larger than it actually is. As the action progresses, the artillery held under brigade control is in a favorable position to move to either flank or directly toward New Windsor, depending on developments. The initial location assigned this battery is such that it can be

reached with little difficulty, affords cover and good observation to the front and flanks, and has good roads leading to the front and flanks.

(4) *104th Observation Squadron.*—One plane of this squadron is now in the air furnishing information to Brigadier General M concerning enemy movements. Without interfering with its present mission, this plane can also furnish information relative to the movements of the two Blue enveloping forces, thus keeping the brigade commander informed of the progress of the action. The two regiments need much detailed information concerning the routes they are following, locations and dispositions of the enemy, and possibly, locations of parts of their combat teams. There has been no great demand for planes since the I Corps started its advance and as the present action will not last long, Brigadier General M is justified in ordering the amount of air observation he considers necessary. The 104th Observation Squadron should be able to furnish all planes needed. Should it for any reason be unable to do so, a request to the 104th Observation Group for assistance would probably result in favorable action. The mechanized forces should not be handicapped by lack of air service in a situation like this where air observation is important and there are ample planes available to furnish it.

(5) *Reserves.*—The 1st Squadron 951st Cavalry [less Troop B (less 1st Platoon)] was selected as the brigade reserve for reasons stated in subparagraphs 11 *d* (1) above. This reserve was moved to Englars Mill, a defiladed, central, location with good roads leading to the front and flanks. It is held centrally located, initially, since the force moving to the right flank, being inferior in strength to the Red force, may need assistance until such time as the 952d Cavalry can get into the action. There is also the possibility that the force in front of New Windsor may have to be strengthened to prevent a Red movement to interfere with either of the Blue regiments.

(6) *951st Engineers (Troop, Mechanized).*—One platoon of mechanized engineers should be attached to each combat team to assist in the advance and during the combat. The troop (less detachments) has administrative functions which are not required in this problem.

*e. Miscellaneous.*—(1) *Limit of pursuit.*—Brigadier General M desires to take every action possible to destroy the Red force, including pursuit to the limit should it become badly disorganized. Initially, however, it would be unwise to commit his force without any control of its further action. As stated before, the action will probably be fought to a finish in the area enclosed between the present Red position and the line: Meadow Branch—Big Pipe Creek unless Red withdraws to the north before becoming seriously engaged. In that event, it would be unwise for units of the mechanized brigade to cross the line: Meadow Branch—Big Pipe Creek without proper coordination because the Red force which had withdrawn in good order would be able to engage the Blue units individually as they were astride of what appears, from the map, to be quite an obstacle. Setting the limit of pursuit initially as the line: Meadow Branch—Big Pipe Creek will enable Brigadier General M to regain control of his force in a short time should the attack “strike in the air.” On the other hand, should Red be caught between two Blue forces and be decisively defeated without being destroyed, it would be very easy for the brigade commander to direct unlimited pursuit of such disorganized Red units as might try to escape.

(2) *Location of Brigadier General M.*—Initially, Brigadier General M is unable to tell which of his regiments will engage the enemy first or what the initial outcome will be. Therefore he chooses a location from which he is in a position to influence the action on either flank or the front by use of his reserve and the artillery under his control. The location he selected is the best observation point in the immediate area. It should be easy to locate from the air or ground. There are roads nearby leading to the front and flanks. He is most favorably situated to move with the 952d Cavalry, his main force, as soon as he can determine that the action on his right is progressing satisfactorily. Any other place, easy to locate, with good observation and roads, centrally located, and convenient to his reserves would be an equally satisfactory location initially for Brigadier General M.

(3) *Others to be notified.*—Officers commanding administrative units would have to be notified of the orders

for the attack. Detailed orders concerning administrative matters however are not required. Since the 1st Cavalry Brigade is in a position that it may become involved in the fight and the I Corps is vitally concerned with anything that delays the mechanized brigade, notice of the impending encounter should be sent to them as soon as possible without interfering with the conduct of the attack.

Activity at Fort Leavenworth centers around The Command and General Staff School. Each year, about 250 officers are graduated from the Regular Course and 50 officers of the National Guard and Organized Reserves are graduated from the Special Three Months Course. The School reaches out into the Army with its Extension Course, its Quarterly Review of Military Literature, and the Book Department which supplies textbooks and maps. Moreover, the commandant and faculty give personal assistance to the National Guard and Reserve Officers located in cities within a wide range of the Post. Each summer, Reserve Officers' Training Camps as well as large Citizens' Military Training Camps are held at the Fort. These Camps have been very successful and are features of great interest to the young descendants of the men who in the days of our great national emergencies gathered at Fort Leavenworth from the surrounding States.